

JPRS 72168

1 November 1978

WORLD EPIDEMIOLOGY REVIEW

No. 112

WORLD

WIDE

20000317 088

U. S. JOINT PUBLICATIONS RESEARCH SERVICE
DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

Reproduced From
Best Available Copy

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22151. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available through Bell & Howell, Old Mansfield Road, Wooster, Ohio, 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

BIBLIOGRAPHIC DATA SHEET	1. Report No. JPRS 72168	2.	3. Recipient's Accession No.
4. Title and Subtitle WORLD EPIDEMIOLOGY REVIEW, No. 112		5. Report Date 1 November 1978	
7. Author(s)		6.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201		8. Performing Organization Rept. No.	
		10. Project/Task/Work Unit No.	
		11. Contract/Grant No.	
12. Sponsoring Organization Name and Address As above		13. Type of Report & Period Covered	
		14.	
15. Supplementary Notes			
16. Abstracts The report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.			
17. Key Words and Document Analysis. 17a. Descriptors Worldwide Clinical Medicine Environmental Biology Hygiene and Sanitation Microbiology			
17b. Identifiers/Open-Ended Terms			
17c. COSATI Field/Group 2E, 6E, 6F, 6I, 6M			
18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22151		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 88
		20. Security Class (This Page) UNCLASSIFIED	22. Price

1 November 1978

WORLD EPIDEMIOLOGY REVIEW

No. 112

CONTENTS

PAGE

HUMAN DISEASES

INTERNATIONAL AFFAIRS

Briefs

Conference on Disease Control 1

ARGENTINA

Five-Year Plan To Combat Leprosy Underway
(LA PRENSA, 19 Sep 78) 2'La Nacion' Exhorts Citizenry To Join Hemorrhagic Fever
Campaign
(Editorial; LA NACION, 21 Sep 78) 4

BOLIVIA

Briefs

Malaria Cases Detected 6

BOTSWANA

Briefs

Incidence of Measles 7

BRAZIL

Ministry of Health Fund Allocations Described
(JORNAL DO BRASIL, 22 Sep 78) 8High Infant Mortality Rate Reported
(O GLOBO, 1 Oct 78) 10

CONTENTS (Continued)

Page

No Funds for Widespread Schistosomiasis (Various sources, 1, 3 Oct 78)	11
8 Million Hit by Schistosomiasis Insufficient Funds	
Meningitis Incidence Above Normal in Rio de Janeiro (JORNAL DO BRASIL, 20 Sep 78)	13
Meningitis Cases on Rise (JORNAL DO BRASIL, 5 Oct 78)	15
Cases of Meningitis in Bahia Investigated (CORREIO BRAZILIENSE, 17 Sep 78)	17
Problems Pertaining to Immunization Against Meningitis Discussed (Various sources, various dates)	19
No Cause for Panic Compulsory Meningitis Immunization Compulsory Immunization Praised Meningitis Vaccine Stock	
Malaria Cases Reported in Amazon Region (JORNAL DO BRASIL, 1 Oct 78)	23
Briefs	
Polio Immunization in Sao Paulo	25
Unidentified Disease Studied	25
Chagas' Disease Increases	25
Immunization Against Meningitis	26
Drug Tested in Belem	26
Infantile Paralysis Immunization Campaign	27
Yellow Fever Deaths	27
Meningitis Statistics Disclaimed	27

BURUNDI

Hygienic Conditions Inadequate in Cholera-Stricken Area (LE RENOUVEAU DU BURUNDI, 21 Jul 78)	28
Fight Against Cholera Should Be General Concern (LE RENOUVEAU DU BURUNDI, 26 Jul 78)	30

CONTENTS (Continued)	Page
Road Blocks, Hygienic Measures Needed for Cholera Prevention (LE RENOUVEAU DU BURUNDI, 31 Aug 78)	32
Briefs	
WHO Cholera Statistics	34
Health Services Effectiveness	34
COLOMBIA	
Malaria-Dengue Campaign Chief Dismissed (EL ESPECTADOR, 22 Sep 78)	35
INDIA	
Assam Fights Against Mosquito-Borne Diseases (THE HINDU, 6 Oct 78)	37
Briefs	
Cholera Deaths	38
Malaria in Northeast	38
Diarrhea Kills 200	38
Encephalitis in Nagaland	38
Post-Flood Diseases	38
INDONESIA	
Briefs	
Cholera in Aceh	40
JAPAN	
Funabishi, Inazawa Report Cholera Cases (KYODO, 14 Oct 78)	41
MALAYSIA	
Briefs	
Johore Cholera Area	42
MOZAMBIQUE	
Vaccination Campaign Proceeding Normally (NOTICIAS, 20 Sep 78)	43
NEPAL	
Briefs	
Cholera in Birgunj Town	45

CONTENTS (Continued)

Page

SOUTH KOREA

Briefs

Hemorrhagic Fever Warning
Encephalitis Confirmed

46

46

THAILAND

Briefs

Malaria Figures
Malaria Cases

47

47

URUGUAY

Vaccination Program To Eliminate Rubella
(EL PAIS, 20 Sep 78)

48

Campaign Against Hydatidosis Discussed
(Saul Pina; EL DIA, 23 Sep 78)

51

Briefs

Shortage of Medical Services

53

VIETNAM

Briefs

Dac Lac Antimalaria Efforts

54

ANIMAL DISEASES

AUSTRALIA

Wa Bans Importation of Bulk Honey

(THE WEST AUSTRALIAN, 4 Oct 78)

55

BRAZIL

Status of Swine Fever Epidemic Discussed

(O ESTADO DE SAO PAULO, 16 Sep 78)

56

CHAD

Briefs

Antirabies Measures

59

CONTENTS (Continued)	Page
LAOS	
Briefs	
Louang Nam Tha Veterinary Work	60
MADAGASCAR	
Government Drive To Stop Rabies Reported (MADAGASCAR-MATIN, 16, 20 Sep 78)	61
Preventive Measures Described Removal of Dogs Defended	
MALAYSIA	
Decrease in Malaria, Cholera Dengue Rates (BUSINESS TIMES, 8, 9 Sep 78)	65
Sharp Drop in Malaria Cases No Cholera, Dengue in Sarawak	
NIGERIA	
Bovine Pleuromonia Kills 40 Head of Cattle in Gongola State (Ibrahim N. Salihu; NEW NIGERIAN, 9 Oct 78)	66
RHODESIA	
Briefs	
Rift Valley Fever Warning	67
Cattle Deaths	67
Spread of Rabies	68
Vaccine Has Short Life	68
URUGUAY	
Measures Taken Against Swine Fever in Rivera (Martin Correa; EL PAIS, 24 Sep 78)	69
ZAMBIA	
'Tough Measures' Needed to Control African Swine Fever (TIMES OF ZAMBIA, 15 Oct 78)	71

CONTENTS (Continued)

Page

PLANT DISEASES AND INSECT PESTS

BRAZIL

- Caterpillars Attack 2 Million Coffee Plants in Parana
(O GLOBO, 3 Oct 78) 72

CHAD

- Oclalav Clarifies Locust Situation
(INFO TCHAD, 28 Aug 78) 74

COSTA RICA

- Briefs
 - Banana Disease Outbreak 76

MALAYSIA

- Outbreak of Septicemia Among Cattle
(NEW STRAITS TIMES, 4 Sep 78) 77

PAKISTAN

- Drive to Control Locusts Underway
(THE SUN, 3 Oct 78) 78
- Plant Hopper Damages Rice in Three Punjab Districts
(THE SUN, 1 Oct 78) 79
- Briefs
 - Antilocust Operation 80
 - Locusts Enter Cholistan 80
 - More Locusts Enter 80
 - Antilocust Measures Increased 81
 - Antilocust Operation 81

VIETNAM

- Briefs
 - Rice Ravaged by Insects 82

INTERNATIONAL AFFAIRS

BRIEFS

CONFERENCE ON DISEASE CONTROL--The influenza vaccine currently in use in the GDR excels in its high quality, effectiveness and tolerance. This was stated on 18 October 1978 by Prof Dr Friedrich Oberdoerster, director of the State Control Institute for Serums and Vaccines, at the beginning of a 2-day scientific conference on the occasion of the 70th anniversary of the Sachsen VEB Serum Plant in Dresden. At the conference experts from Bulgaria, CSSR, Poland, Romania, USSR, Hungary and the GDR are discussing current problems pertaining to influenza and measles prophylaxis. Another subject is the standardization and control of vaccines for human medicine. As was stated by GDR scientists at a press conference, the intent of the meeting is that the cooperating partners in the area of vaccine research in all CEMA countries will work more closely together to control infectious diseases by means of vaccines. [Excerpt] [East Berlin BERLINER ZEITUNG in German 19 Oct 78 p 2]

CSO: 5400

ARGENTINA

FIVE-YEAR PLAN TO COMBAT LEPROSY UNDERWAY

Buenos Aires LA PRENSA in Spanish 19 Sep 78 p 6

[Text] The Minister of Social Welfare, Vice Adm Julio Juan Bardi, visited the meeting place of the Association of Argentine Knights of the Sovereign Military Order of Malta, at 633 Mayo Avenue, where members of the association extended him a welcome.

In this meeting various aspects of the national leprosy program, which is being undertaken by the public health authorities and of which a new phase will be initiated covering the endemic portions of the country, were made known.

Present were: the president of the association, Federico Perel Ramol; the vice president, Manuel J Escasany; the chaplain of the order, Msgr Victorio Bonamin; the consultant from the World Health Organization, Dr Fernando Noussitou, member of the sovereign order and other officials.

First Minister Bardi spoke and afterwards details of the national leprosy program were released.

The National Plan

The plan which is being put into effect is unique in South America. It is a dynamic program and will be used as a model in Thailand. It will seek out patients by means of mobile teams which will move about in the interior of the provinces.

The task will be divided into four areas: the northeast area, which makes its base Chaco Province and to which Formosa, Misiones and Corrientes are subordinated as a region; area two number is made up of the provinces of Cordoba, Entre Rios and Santa Fe; number three is formed by Salta, Tucuman and Santiago del Estero. The incidence is much lower in the northeast. Buenos Aires has available two mobile teams for Greater Buenos Aires and the federal capital.

The policy underlying the plan is to bring the benefit of leprosy treatment to the sectors having the least resources which consists of providing the

patients with free medication, of providing attention for those living with the patients and of making an early diagnosis.

The program will last 5 years, with the possibility of its being extended to 10 years.

Dr Federico Peralta Ramos, president of the Association of Argentine Knights of the Sovereign Order of Malta summarized the work of the institution in the scientific, public assistance and cultural fields.

The Disease

Minister Bardi made reference in his address to the activity that the ministry of which he is head is undertaking against leprosy and he mentioned the special effort being made in the interior of our country in the affected areas.

He gave as an overall statistic that the prevalence of the disease is 10.44 per 10,000 inhabitants in the entire country and he mentioned the agreements which have been made with our neighboring countries such as the one signed with Paraguay which is now being carried out.

9204
CSO: 5400

ARGENTINA

'LA NACION' EXHORTS CITIZENRY TO JOIN HEMORRHAGIC FEVER CAMPAIGN

Buenos Aires LA NACION in Spanish 21 Sep 78 p 8

[Editorial: "The Fight Against Hemorrhagic Fever"]

[Text] The lack of verifiable statistics on the malignant epidemic disease known as Argentine hemorrhagic fever precludes any definite knowledge of the likelihood of its spread or of the consequent fatal results. We have often repeated the need for concentrated official and private efforts to prevent and eradicate this virous disease which has taken hold primarily in the corn growing areas of the country.

Initially detected in Junin, Chacabuco, Pergamino, Rojas and Salto the disease spread into the neighboring provinces of Cordoba and Santa Fe. At the same time the first medical criteria appeared and the initial research was undertaken which lay the groundwork for the campaign against this tragic scourge on the basis of detailed observation. The visit to this country of the discoverer of the polio vaccine and Nobel Prize winner permitted us to learn his opinion as to the appropriate lines of action to alleviate the disease: among others, the improvement of the condition of the field laborer through the mechanization of agriculture, the extermination of rats and the preparation of a vaccine to guarantee the effective immunity of the local population. For this the coordination of the scattered efforts of the laboratories, institutes and professors devoted to microbiological research on this fever would obviously be required. Also parallel to this, we should develop a responsible attitude on the part of official agencies such as the National Highway Department and the Argentine railways and on the part of the farm owners who should try to eliminate stubble and weeds which are the favorite food of the rodents who are the vectors for the virus.

Repeated professional appeals, made at various levels, together with a concerned public opinion have finally met with sufficient response in the Scientific Research Commission of the province of Buenos Aires to set up a united battle front. For 2 years an attempt has been made to centralize the results of the virological experiments on this disease and to subsidize the hemorrhagic fever diagnostic and treatment centers under the directing authority of the institute located at Pergamino.

The vaccine, which is one of the prime objectives of this coherently implemented campaign, will have to be the end result, required in order to save the rural inhabitants of the country.

There will function in Pergamino--thanks to a subsidy of \$1 million provided by the government of that province--the specialized laboratories which will coordinate all the information gathered and experiments carried out throughout the nation. At the same time it will be advisable, as an intermediate course of action, to establish guidelines for the task and for the use of the subsidy. Corresponding then to the coordination of individual efforts there will be a harmonious common strategy which must result in the longed-for achievement being sought: to eradicate an endemic viral disease which has taken many lives due to the lack of sustained preventive action.

9204

CSO: 5400

BOLIVIA

BRIEFS

MALARIA CASES DETECTED--More than 100 cases of Malaria have been detected in the town of Caranavi and neighboring settlements in the Yungas area, according to the National Service for the Eradication of Malaria [SNEM]. The health ministry is already taking steps to avoid a spread of the disease and is providing free medical supplies and examinations to the public. [La Paz PRESENCIA in Spanish 18 Oct 78 p 11 PY]

CSO: 5400

BOTSWANA

BRIEFS

INCIDENCE OF MEASLES--Three children have died in Mochudi following an outbreak of measles in the village, according to medical officers at the Diborah Retief Memorial Hospital. Two of the victims of the disease who came from the same family were standard one pupils at Isang Primary School. Relatives have asked their names to be withheld. According to the hospital authorities a large number of children in the village was infected and treated. It was likely they said that many of them could still be lying at their homes untreated. The outbreak was discovered around September at Madibana Ward. At present about ten children with serious complications have been hospitalised. [Excerpt] [Gaborone DAILY NEWS in English 11 Oct 78 p 1]

CSO: 5400

BRAZIL

MINISTRY OF HEALTH FUND ALLOCATIONS DESCRIBED

Rio de Janeiro JORNAL DO BRASIL in Portuguese 22 Sep 78 p 7

[Text] Brasilia--The Ministry of Health is to allocate 1,020,000,000 cruzeiros in 1979 to combat and treat schistosomiasis, which effects 12 million Brazilians, and 358,496,000 cruzeiros to combat and treat Chagas' disease (7 to 8 million victims) according to the plan for the allocation of federal budget resources.

The expenditure for the control of malaria will be 828,145,000 cruzeiros, yellow fever, 121,225,000, while 860 million will be allocated for food and nutrition and 168,283,000 for improvement of sanitation conditions and rural housing. The allocation to control tuberculosis, with more than 300,000 victims, will total 270,857,000 cruzeiros.

Other Sectors

In all, the Ministry of Health will spend for the control of communicable diseases, the epidemiological survey system and the building of public health laboratories 2,755,934,000 cruzeiros, including 1,973,990,000 this year. Plague control will account for 77,875,000 cruzeiros, while 45,051,000 has been allocated for leprosy.

In the medical and health aid sector, including maternity and infant health aid and services, cancer control, prevention and treatment in the mental health sector, rehabilitation of the physically disabled, medical-dental aid, extending health campaigns and other activities to the interior areas, the Ministry of Health will spend, from its government resources, about 1,474, 041,000 cruzeiros, including 1,059,247,000 this year.

Expenditures for the control and expansion of water supply systems, including quality and potability control, and the construction of sewage networks, 58,518,000 cruzeiros will be spent in 1979. The estimated resources for this year for these sectors total 37,576,000 cruzeiros.

Again in the basic health sector, specifically the rural areas, those suffering from endemic schistosomiasis, health facilities and the operation of health centers in endemic schistosomiasis sectors, the Ministry of Health will spend 386,123,000 cruzeiros. The health fund estimate for 1978 comes to 299,339,000 cruzeiros.

A total of 90,620,000 cruzeiros will be spent for the health inspection and supervision of ports, airports, and frontiers and the supervision of the analysis of drugs and medicines. The estimate for this year is 60,393,000 cruzeiros.

5157

CSO: 5400

BRAZIL

HIGH INFANT MORTALITY RATE REPORTED

Rio de Janeiro O GLOBO in Portuguese 1 Oct 78 p 9

[Text] Sao Jose Dos Campos (O GLOBO). The infant mortality rate in Sao Jose dos Campos last year was 472 deaths per 1,000 births or 47.2 percent according to a study prepared by Dr. Antonio Celso Escada.

According to the study, these statistics point to the nutrition of mothers and children, disease control, immunization, and the action of prenatal and postnatal services.

According to the WHO, an infant mortality rate above 100 per 1,000 births is considered "very high," while it is considered "high" between 70 and 100 and "moderate" between 50 and 70.

Causes

The study announces that more than 50 percent of the deaths of infants under the age of 1 are due to infectious diseases while 12 percent of the death certificates in 1975 did not give any cause.

"These diseases," states the study, "can be prevented through public health measures, reducing the deaths by at least 75 percent."

Dr. Celso Escada said in his study that the health level of Sao Jose dos Campos "permits us to say that current conditions in the township leaves much to be desired primarily in terms of the hospital network. The impact of domestic migrations generally promotes the endemic nature of certain diseases, increasing the mortality coefficients in the townships because there is no adequate medical and health assistance available."

According to the study by Dr. Antonio Celso Escada, infants of the age of 1 accounted for 26 percent of the deaths in Sao Jose dos Campos in 1977. The 1968-1977 stillborn rate is 32 per 1,000 live births and this indicates that the prenatal area requires special attention.

The average determined in Sao Jose dos Campos for the neonatal death rate was 36.50 percent per 1,000 live births and 46 percent for delayed infant mortality.

BRAZIL

NO FUNDS FOR WIDESPREAD SCHISTOSOMIASIS

8 Million Hit By Schistosomiasis

Brasilia CORREIO BRAZILIENSE in Portuguese 1 Oct 78 p 13

[Text] In Brazil, an estimated 8 million persons are still afflicted with schistosomiasis according to a report prepared by SUCAM (Superintendency of Public Health Campaigns) on the results of the activities carried out by the health ministry during the current term of the administration.

According to the report, this is happening in spite of the new method used in fighting this endemic disease, following the establishment, in 1976, of the PECE (Special Schistosomiasis Control Programs) which has already administered medical treatment to 660,000 persons in the Northeast.

The new methodology introduced by the PECE involves the application of medication ("oxamniquine" in a single dose) in adjacent population settlements while at the same time a drive is launched to eradicate the gastropod which is the carrier of the disease in wells, streams, etc.

Parallel to that, the ministry--through the SESP (Special Public Health Services) Foundation--supplements these measures by installing water supply services, building laundries with boiler facilities and public baths, or even private home hygiene facilities.

The PECE also included in this effort certain "extensive health education measures involving the participation of health patrol teams consisting of students and neighborhood agents designed to motivate the community to support the program's objectives," according to the report.

To bring Chagas disease under control--a disease which hits between 7 and 8 million Brazilians--the health ministry is conducting a serological investigation, by collecting blood samples, from pupils between the ages of 7 and 14; it is also conducting a survey of areas infested by the barber bug, which transmits the disease.

Chagas disease is transmitted by an insect known as "barber bug" which lives and reproduces in the cracks of clay or mud walls.

The region hit by the disease in Amazonia contains a population estimated at 40 million persons in a total of more than 1,200 townships. The SUCAM report indicates that a geographic survey of the disease already covers 938 townships with a real estate survey covering 5 million homes and nearby structures, sheltering 11.6 million persons.

So far however the number of homes which have been the subject of improvements or which were rebuilt is still insignificant out of this total; this is only a pilot experiment designed to evaluate methods and results.

Insufficient Funds

Rio de Janeiro JORNAL DO BRASIL in Portuguese 3 Oct 78 p 8

[Text] Brasilia. Minister Paulo de Almeida Machado admitted that it will be difficult for the Federal Savings Bank to release the 900 million cruzeiros requested for the fight against schistosomiasis but said that "the lack of these funds, which constitute only an increase in the allocations requested by the health ministry, will in no way harm the basic health program."

5058

CSO: 5400

BRAZIL

MENINGITIS INCIDENCE ABOVE NORMAL IN RIO DE JANEIRO

Rio de Janeiro JORNAL DO BRASIL in Portuguese 20 Sep 78 p 7

[Text] An average of 40 cases of meningitis per month, now being recorded in Rio, is "above the endemic level," according to an opinion expressed yesterday by Felipe Cardoso, municipal secretary of health; but mass vaccination is not yet justified, according to him. Staffs at the various health centers are investigating each case and administering preventive medication to persons who have had contact with anyone suffering from that disease.

The situation is considered normal by Minister of Health Almeida Machado, who also sees no need for vaccination but gives assurance that there is sufficient supply of serum in case of necessity. Vinicius Fonseca, president of the Oswaldo Cruz Foundation [FIOCRUZ], estimates the supply to be 8 million doses, which he attributes to the fact that notice of the outbreak was given "to private clinics interested in charging for the vaccinations."

Not Included in the Plan

The occurrence of only one outbreak of the disease 4 years ago does not justify the inclusion of meningitis in the National Immunization Plan and, for that reason, the health centers do not have the vaccine for routine application. This clarification comes from Secretary Felipe Cardoso, who, meanwhile, was reluctant to give the maximum number of cases required to characterize "the situation as one of epidemic proportions" requiring mass vaccination.

Staffs in the health centers' epidemiology sectors are investigating each case and identifying any person related to victims of the disease. In those cases the antibiotic, minocycline, is administered as a preventive measure, since the disease's incubation period is from 10 to 14 days, whereas the vaccine takes about 15 days to develop immunity.

Minister Almeida Machado gives assurance that the government will be able to act well ahead of time in the event of an epidemic of meningitis, "although it is hoped that we shall never again be surprised by epidemics

and diseases that are already well-known." He stated that "there is now an epidemiological vigilance that enables us to detect variations of incidence and identify tendencies."

He further explained that the disease occurs in various forms but that only meningitis meningococcus, type A or C, is epidemic. He gave assurance that there is a supply of vaccines in sufficient number, in case of necessity, to vaccinate the entire population and that there are staffs trained for this work ready to go into action at any moment.

Speculation

Fonseca believes that the possible outbreak of meningitis "is no more than a false claim by pediatricians interested in steering children to private clinics for vaccination as a form of speculation aimed only at making money." He recalled that, in 1975, a group of Sao Paulo doctors bought doses of the vaccine from the foundation at 10 cruzeiros each and then charged their patients 200 cruzeiros per vaccination.

"When I saw that the vaccine was being used to make money, I immediately suspended the supply of the product to private institutions and, since that time, not a single dose has left here," Fonseca said. For that reason, he is surprised at the application of vaccines, as he was also informed that the French manufacturer, Merieux, is not exporting doses to Brazil.

The Ministry of Health has a stock of 8 million doses and, according to the FIOCRUZ president, the production of another 10 million is planned for next year.

8568

CSO: 5400

BRAZIL

MENINGITIS CASES ON RISE

Rio de Janeiro JORNAL DO BRASIL in Portuguese 5 Oct 78 p 17

[Text] The State Health Secretariat yesterday explained that, compared to last year, there has been an increase in 1978 in meningitis cases caused by streptococcus pneumoniae and hemophilus influenzae, whereas meningococcic meningitis dropped from 51.2 percent last year to 44.7 percent of the total number of meningitis cases during the first half of this year.

The Sao Sebastiao State Hospital in September admitted 134 patients with meningitis, including 16 cases of the meningococcic type. During the first 2 days of October, ten patients with meningitis were admitted, including one case of the meningococcic type.

Outbreak

The director of the Epidemiology Department of the State Health Secretariat, Mr. Samuel Vale, recalled that there is a vaccine only against meningococcic meningitis--the most dangerous form of this disease--and that a precise diagnosis on the type of meningitis can be obtained only by means of a series of tests. He said that "there are laboratory tests which are not reliable," adding that bacterioscopy alone is not sufficient to identify the disease accurately.

The Urgil Clinic in Ipanema admitted 22 children with meningitis in September and currently is treating ten cases. Dr Carlos Neri, director of Urgil, said that "only two cases are of the meningococcic type. There is an outbreak of virus meningitis of the mild type which does not leave lesions in the majority of cases." The doctor said also that the Amil and Urpe Clinics in Botafogo are jammed with meningitis cases.

The Supisaua School, with 130 children, in Gavea, was closed yesterday. According to a circular sent to the parents, the principal decided to do that because he was "worried about the lack of information on the disease. We remember what happened several years ago when the outbreak was denied by the authorities and when they even censored the press."

Mr. Antonio Valente, the pedagogic supervisor at the Sapisaua School, explained that "we were worried about the news reaching us. Some schools in Gavea had some cases. The mothers were in a state of panic and did not know whether there was or there was not an outbreak of meningitis. The school management met and decided to sign a statement on this subject since the authorities did not provide any information on the disease."

Mr. Antonio Valente said that "we decided to close the school until Monday and to clean it out. There was one case of suspected meningitis which we learned about only after we had decided to close the school. We leave it up to the parents as to when the school is to be reopened. Many children have already been absent from classes."

The Stockler kindergarten, with 350 pupils, likewise in Gavea, was not closed down in spite of the fact that two children had caught the disease. Mrs. Liddi Stockler, the school director, said that "we consulted doctors who advised us not to close the school because one of the children caught meningitis in Sao Paulo and because the cases were of the virus type. We closed the swimming pool, we turned the drinking fountains off, and we cleaned the place."

On the Premises

In the Gavea Park Building, at 138 Santos Dumont Square, there are three children with virus meningitis; two of them are little girls from the Stockler kindergarten. Mrs. Shirlei Campos Camara, the building superintendent, explained that this "has already been reported to Public Health but so far nobody has come. I have already ordered a general house-cleaning on the premises, using disinfectants. We have almost 300 children here and the mothers are very anxious. Many went to their country homes and those who remained in Rio do not go downstairs to play."

Mr. Carlos Neri, director of the Urgil Clinic, said that "children of up to 3 years, who do not have to go to school, should not go out. Neither to the schools, nor to the theaters, festivities, or any other places that are closed. There is an outbreak of virus meningitis. Some cases have so far been treated even without antibiotics and most of them left no lesions. The age group most hard-hit is between 2 and 7."

The doctor said that clinics in the Southern zone had problems in accommodating the children because they did not have a very large bed capacity. "The Amil and Urpe Clinics are jammed and so are we."

The Teresiano High School in Gavea, which had two cases of children with meningitis, was disinfected and reported another case after disinfection.

5058
CSO: 5400

BRAZIL

CASES OF MENINGITIS IN BAHIA INVESTIGATED

Brasilia CORREIO BRAZILIENSE in Portuguese 17 Sep 78 p 10

[Text] "We are investigating these cases in Bahia," Minister of Health Almeida Machado stated yesterday referring to the news that more than seven cases of meningitis allegedly occurred in the interior of that state within a matter of days.

Meanwhile, the minister minimized the news that there are allegedly cases of meningitis in various other states, such as Parana, Rio de Janeiro and Sao Paulo, asserting that "this type of reaction" was expected as a result of the announcement of a mass vaccination in three of Brasilia's satellite cities.

According to Almeida Machado, the cases of meningitis reported up to now-- "one here, one there"--are within normal endemic limits and there is, therefore, no need to promote mass vaccination throughout the country. "If that need should occur," he added, "we would do what we are doing in Bahia--carry out mass vaccination."

He stated that in Taguatinga, Ceilandia and Planaltina "no increase in the cases of meningitis was feared before 1979."

Great Difference

"There is a very great difference between the current situation and that of 1974," Almeida Machado remarked. "At that time we did not have the vaccine nor any facilities for making it."

Now, on the contrary, the Oswaldo Cruz Institute is not only able to manufacture the vaccine but also our country has sufficient stocks available to begin a mass vaccination campaign. There is also an entire system of epidemiological vigilance with a special committee to control the occurrence of meningitis meningococcus, which sends information monthly to the minister's office.

"We can now act," the minister emphasized, "long before the need becomes urgent. And we can act in a rational manner, vaccinating the entire population."

Hiding the Facts

Meanwhile, another difference was pointed out by one of the ministry's technicians: "At that time the facts were kept secret, but you can be sure that such is not now the case," the technician stated.

He went on to say that, in practice, there is no advantage whatever in hiding this type of information, as that can only serve to create an atmosphere of uneasiness and anguish among the people: "At that time the people became calm, when the existence of the epidemic was acknowledged by the authorities, and each day we published the number of persons afflicted by the disease. They also felt more at ease, when we organized hospitals and a telephone exchange with a number of telephones taking care of calls and directing patients to appropriate hospitals. There was a bulletin board at the telephone exchange kept permanently up-to-date with the number of vacant beds at each hospital."

The technician also recalled the anxiety created before the authorities acknowledged the existence of the epidemic due to the fact that there were "many people who died en route from one hospital to another seeking an unoccupied bed where there was none."

In affirming categorically that nothing of this nature is now happening, the technician mentioned that one or two cases of meningitis in a city such as Rio de Janeiro "means nothing."

He concluded by stating that, in the Brasilia vaccination program, "we are only helping these people in order to be able to help others later."

8568

CSO: 5400

BRAZIL

PROBLEMS PERTAINING TO IMMUNIZATION AGAINST MENINGITIS DISCUSSED

No Cause for Panic

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 26 Sep 78 p 19

[Text] Brasilia--In an official statement released yesterday by the mass media coordinating office, the Ministry of Health "confirmed that there is no indication at the time that it is necessary to undertake the mass vaccination of the population against meningococcus meningitis throughout the country. The people can be reassured since this confirmation is the result of the continuing epidemiological survey being carried out by the ministry, which has moreover found no evidence requiring further immunization campaign."

This statement came as a result of insistence on the part of the people, mainly in Brasilia, who have been questioning the ministry in person or by telephone about vaccination against meningitis.

As some isolated cases of meningitis have occurred not only in outlying towns around Brasilia but throughout the country, the people are fearful of another epidemic like that which occurred in 1974 and 1975, when more than 80,000 persons were immunized. But the statement by the ministry is reassuring: "The control measures being undertaken today for the isolated cases which do occur are of the most effective kind, involving prompt diagnosis and treatment of the patients as well as preventive medications for other members of the patients' households."

Compulsory Meningitis Immunization

Rio de Janeiro JORNAL DO BRASIL in Portuguese 27 Sep 78 p 9

[Text] Vaccination against meningococcus meningitis will be included in the Ministry of Health's national immunization program next year, becoming compulsory along with the triple vaccine, BCG, Sabin vaccine and those against smallpox and measles, it was announced yesterday by the president of the Oswaldo Cruz Foundation, Vinicius Fonseca.

A part of the stock of 1,880,000 doses of vaccine produced last year is being tested to establish whether it still is of immunizing strength, since its useful life, which is a year and a half when it is stored at a temperature of minus 20°, is nearing its end.

Production

The Oswaldo Cruz Foundation has produced 600,000 doses per month of anti-meningococcus vaccine since the beginning of this year, and by December it will have a stock of almost 10 million doses, including the 1,880,000 on hand from last year. The production in 1977 was 2 million doses, of which 100,000 were requested by the secretariat of health in Minas Gerais and 20,000 by the secretariat of health in the state of Rio de Janeiro. Mr. Vinicius Fonseca agreed that it is better to distribute the vaccine to the health stations than to leave it in cold storage with the CIBRAZEM [Brazilian Warehousing Company], where it loses its immunizing power with the passage of time, but he noted that the foundation only produces the vaccines and does not make the decisions about their distribution.

He added that if it were necessary to effect a mass vaccination of the population, the Ministry of Health could purchase large quantities from the Merieux Institute, but to date the ministry has not found this measure necessary.

The third case of meningococcus meningitis in Rio de Janeiro private schools was confirmed yesterday. The patient is a student at the Applied Secondary School of the PUC [Pontifical Catholic University], who was taken to the Sao Sebastiao Hospital in Caju. As a preventive measure, the municipal health secretariat administered minocycline to the parents and fellow students of the sick girl.

The stocks at the private vaccination clinics are exhausted. At the Climuno and Previmuno Clinics, where there were lines last week, no more vaccine is available. Each dose costs 200 cruzeiros, and at the Clivak Clinic, vaccinations are being given at 300 cruzeiros per dose only by appointment, and its supply will run out today.

The two other meningitis victims were Debora Blajchman, two years old, a student at the Barilan School, who died 15 days ago, and Larissa Costa Santos, of the Santa Teresa School in Tijuca, who recovered after spending 10 days at the Fundao University Hospital.

Compulsory Immunization Praised

Rio de Janeiro O GLOBO in Portuguese 28 Sep 78 p 14

[Text] Municipal Health Secretary Felipe Cardoso regards as "excellent" the inclusion of an anti-meningococcus vaccine in the Ministry of Health's national immunization program next year, announced yesterday by the president of the Oswaldo Cruz Foundation, Vinicius Fonseca.

Epidemiologists and doctors at the Sao Sebastiao Hospital in Caju (the only isolation facility for infectious patients in Rio) have been urging that such vaccination be made obligatory since 1974, when the largest epidemic in recent years broke out. They have repeatedly voiced their concern about the fact that the Ministry of Health was delaying beginning production of the vaccine, which was made possible by a transfer of technology from the Merieux Laboratory in France.

Currently, according to a statement by the president of the Osvaldo Cruz Foundation, the immunizing strength of 1,800,000 doses of vaccine of the bivalent AC type (effective against two strains of meningococcus) produced by Manguinhos last year is being tested. Although the Health Ministry has placed an order of five million doses for this year Vinicius Fonseca believes that production will reach eight million doses of vaccine by December.

The president of the National Meningitis Commission, Edmundo Juarez, commented on the difficulties in the distribution of immunizing vaccines, the fact that the health centers in Rio are not equipped with facilities for refrigeration at a temperature of minus 20 degrees being among them. The president of the Osvaldo Cruz Foundation stated that it is better to distribute vaccines than to leave them in storage, but he also noted that "the foundation produces immunizing substances, but only the Ministry of Health has the power to decide what will be done with them."

No Problem

In the view of Municipal Health Secretary Felipe Cardoso, "if anti-meningococcus vaccine is actually included in the program of the Rio health centers, there will be no problem where stocking and distribution is concerned." He said that at its storage facilities at No 1552 Ana Neri Street, the municipal health secretariat has two cold-storage chambers, one with the capacity which could accommodate several million doses of vaccine at a temperature of minus 20 degrees.

Concerning distribution to the 23 regional health centers, he explained that all that would be needed would be the purchase of freezers at a price of 9,000 cruzeiros each, an expenditure which he said the secretariat could cover. He noted that the vaccine need not be kept at minus 20 degrees at the health centers, because there is a short-term turnover in the stocks, depending on the number of doses administered.

He noted, in conclusion, that during the intensive campaign of vaccination against meningitis in 1975, the sector now known as the General Public Health Department stored, distributed, and administered more than four million doses of meningococcus vaccine in less than 15 days.

Meningitis Vaccine Stock

Rio de Janeiro JORNAL DO BRASIL in Portuguese 28 Sep 78 p 17

[Text] The State Secretariat of Health announced yesterday that of the 20,000 doses of vaccine against meningitis purchased from the Oswaldo Cruz Foundation last year, about 10,000 were administered in Angra dos Reis, where there was an outbreak, and to subway workers in the Botofogo area, where there was one case. The remainder was stored for use in case of need.

Secretary Woodrow Pantoja is of the opinion that there is no need to distribute vaccines for administration to the population of Rio, despite the occurrence of two cases of meningococcus meningitis in recent weeks.

5157

CSO: 5400

BRAZIL

MALARIA CASES REPORTED IN AMAZON REGION

Rio de Janeiro JORNAL DO BRASIL in Portuguese 1 Oct 78 p 27

[Text] Brasilia. A document forwarded to the health ministry announces that, last year, 101,000 cases of malaria were detected of which 94 percent or 94,940 cases, occurred in the Amazon region. The Superintendency for Public Health Campaign has promised to watch the 10.9 million inhabitants.

According to the SUCAM [Superintendency for Public Health Campaigns] report, the original malaria area was distributed over 25 out of the 28 units of the Federation, covering 6.9 million square kilometers and a population of 45.6 million inhabitants. The surveillance area, in turn, based on the effectiveness of field operations actually carried out, accounts for 3 million square kilometers and a population of 34.6 million inhabitants.

Remedy

In the fight against malaria, the health ministry will, in Amazonia, use mephloquine, a medication used by the U. S. Army in Vietnam, which produces a cure in 95 percent of the cases caused by the protozoon plasmodium falciparum, where the possibilities of recovery had until then been rather poor. The fight against the disease in the region will be launched with the installation of special equipment to be sent by the WHO to the Barros Barreto Hospital in Belem thus facilitating laboratory tests using fluorescence microscopes, fibrometers, and mechanical counters.

Obstacles

Information from SUCAM hints that the malaria eradication and control campaign is being carried out in all townships throughout the Amazon region, including long-term operations. The responses in this region however are very slow because of its ecology, with its extremely humid and hot climate and a very extensive drainage basin.

"In addition to these environmental conditions," SUCAM points out, "there is an unusual flow of migration with the formation of as yet unstable communities." But, in spite of these adverse conditions, SUCAM says that it managed to interrupt the transmission of the disease in various areas of Amazonia.

Tests

In its activity report, SUCAM announced that, in 1977, 2.6 million blood samples were taken, with a positive indication in 3.9 percent of the cases, including 10.5 percent in Amazonia and 0.5 percent for the rest of the country. This index fluctuated slightly, although no more than 1 percent, by virtue of some isolated outbreaks.

Last year, 4.5 million doses of DDT were administered. In 1974, 5.7 million were needed. In the opinion of SUCAM, the stabilization of the new population settlements in Amazonia will promote the achievement of better results in the eradication and control of malaria in this region.

Chagas Disease

Regarding Chagas disease (barber bug disease), SUCAM announced that the potential Chagas disease area, with an estimated population of 40 million inhabitants, is already being covered by operations to the extent of more than 60 percent of the territory involved. The agency is conducting a serological investigation throughout the country on the prevalence of the disease among pupils between the ages of 7 and 14, as well as a triatomine survey, aimed at the preparation of a chart showing the distribution of the Chagas infection carriers.

SUCAM explained that, in 132,620 blood samples taken in 476 townships and subjected to the Machado Guerreiro reaction, the positive rate varied from 0.09 percent to 60.46 percent, in earlier surveys. During the current serological investigation, involving 1,213 selected townships, we obtained 536,000 blood samples out of a total of 545,000 planned.

In the course of the geographic survey and the triatomine survey, during the period of 1975-1977, we covered 938 townships and 5 million homes and connected buildings were recorded on the real estate register, with 11.6 million inhabitants.

During 1976, we investigated 60,455 localities in 766 townships in 13 units of the federation and there was a positive response on the presence of the barber bug in 22,628 of these localities. Out of 1 million homes inspected, about 88,765 contained barber bugs. During 1975-1977, the triatomine survey reached 5.2 million homes, of which 252,500 presented positive results for this disease. Throughout this program, SUCAM applied BHC in 1.9 million homes.

5058

CSO: 5400

BRAZIL

BRIEFS

POLIO IMMUNIZATION IN SAO PAULO--All children from two months to three years of age are to be taken to the 502 vaccination stations in municipalities of Greater Sao Paulo to be immunized against infantile paralysis, thus completing the 10th campaign of intensified vaccination sponsored by the secretary of health. The stations will be open from 800 to 1700 hours at state health centers, municipal health units, schools, neighborhood associations, parish churches, community centers, service clubs and other localities. The vaccination campaign will last one day, but after that immunization can be obtained on a normal basis at the health centers and municipal health units. On 20 September, 297,978 doses of Sabin vaccine were administered in the capital, according to the figures of the Greater Sao Paulo regional health department. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 27 Sep 78 p 16] 5157

UNIDENTIFIED DISEASE STUDIED--Belo Horizonte--Two technicians from the Sao Paulo Biological Institute are scheduled to arrive here today to collaborate in the studies to determine the causes of a strange illness encountered on the Colina Ranch in the municipality of Ribeirao das Neves in the metropolitan region, which has caused the death of nine persons. The most recent case reported involves a three-year old girl, Rosangela da Costa Ferreira, who is still under care in the Cicero Ferreira Hospital in this city, although the clinical picture is stable. According to the advisor to the state superintendency of health, Jose Teubner Ferreira, the results of the studies of water and urine samples collected locally have not yet been released. On Wednesday, the secretariat of health arranged for new urine and blood samples from the people at the Colina Ranch for dispatch to the Sao Paulo Biological Institute, on the theory that substances for the protection of farm products caused the poisoning. [Text] [Rio de Janeiro O GLOBO in Portuguese 22 Sep 78 p 8] 5157

CHAGAS' DISEASE INCREASES--Belo Horizonte--"The spread of endemic Chagas' disease in Brazil, where there are about four million carriers of the disease, which is continuing to develop over the greater part of the territory without any control, is without a doubt a priority public health program meriting the allocation of greater attention and resources by the Ministry of Health."

This statement was made by Dr. Joaquim Romeu Cancado, a professor of clinical medicine at the Faculty of Medicine at the UFMG [Federal University in Minas Gerais], who presided at a roundtable on Chagas' disease yesterday, during the first conference on infectious and parasitic diseases sponsored by the Minas Gerais Medical Association. The doctor stated that 12 percent of all the individuals currently applying to the outpatient facilities of the clinical hospital of the faculty of medicine at the UFMG are infected with *Trypanosoma cruzi*, the virus which causes the disease. [Text] [Brasilia CORREIO BRAZILIENSE in Portuguese 29 Sep 78 p 8] 5157

IMMUNIZATION AGAINST MENINGITIS--Brasilia--Refusing to disclose the amount of money spent by the Ministry of Health on the vaccination of 346,950 persons against meningitis meningococcus during the past weekend in Brasilia's satellite cities--Taguatinga, Ceilandia and Planaltina--Minister Almeida Machado stated yesterday that the result of the campaign (89 percent of the people immunized) exceeded his expectations, since the goal was to vaccinate 80 percent of the total population or 390,000 residents in the three cities. Among other positive aspects of the campaign, the minister cited the fact that it is now possible to foresee the disease and vaccinate the people before it affects a particular locality or becomes an epidemic, thus avoiding the tragedy of 1974 when thousands of persons died from the disease and the vaccination of 86 million Brazilians was possible only after the epidemic had spread throughout the country. "This time," the minister explained, "there was no uncontrolled race to be vaccinated." He estimated that only 500 persons came running from neighboring cities--an insignificant number compared with the total number vaccinated--unlike 1975, when "buses discharged thousands upon thousands of persons at the health centers. This time the people understood that it was necessary to be vaccinated and appeared without hustle and bustle," which, in his opinion, was due to the serious manner in which the information was disclosed, particularly by radio and TV. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 19 Sep 78 p 18] 8568

DRUG TESTED IN BELEM--Brasilia--The country's first clinical test of the drug mefloquine, whose application in a single dose can cure or prevent malaria--without the need to hospitalize the patient--will be held in Belem in October during a joint meeting of the Superintendency for Public Health Campaigns (SUCAM), the ministry of Health, the Pan-American Health Organization (PAHO) and the World Health Organization (WHO). Depending upon the result of that first clinical test, mefloquine, which is of foreign manufacture, will be produced in our country, since we now have no remedy for the treatment of malaria or vaccine for its prevention. The new medicine was already tested experimentally establishing that it possesses therapeutic and immunological properties. During the test phase SUCAM will assume the responsibility for any expenses connected with the hospitalization of patients. Adults will remain in the hospital 63 days for systematic medical observation, all research being paid for by the WHO and the PAHO. Barros Barreto Hospital in

Belem was chosen to accommodate this international project. As Brazil is the second largest financial collaborator of the PAHO, that organization decided to hold periodic meetings in our country, many of which will also be sponsored by the WHO, which will ultimately evaluate the quality of all programs carried out by our government to combat serious endemic diseases. From September of this year to February 1979 the PAHO and the WHO will sponsor seven more international meetings in Brazil. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 23 Sep 78 p 14] 8568

INFANTILE PARALYSIS IMMUNIZATION CAMPAIGN--Tomorrow the Secretariat of Health will promote another Sabin vaccination for children from 2 months to 3 years of age. There will be 530 stations operating from 0800 to 1700 hours in health centers, city and state schools, friendly neighborhood companies, community centers and the capital's parishes. This is the second phase of the campaign to intensify vaccination against infantile paralysis held this year; children who are not vaccinated tomorrow should be taken to the state health centers and city health stations on another day. In the first phase of the vaccination campaign, held last June, 353,141 and 233,226 doses of the Sabin serum were administered in the capital and in Greater Sao Paulo respectively. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 19 Sep 78 p 18] 8568

YELLOW FEVER DEATHS--Rio Branco--Rubber-tree tappers Francisco Bento and Raimundo Vicente and three other persons died this month of yellow fever in the municipality of Boca do Acre on Antimari River, according to information sent Wednesday by sisters of the Boca do Acre church in a letter to the prelacy of Acre and Purus. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 22 Sep 78 p 8] 8568

MENINGITIS STATISTICS DISCLAIMED--Rio de Janeiro, 24 Oct (AFP)--Meningitis caused 329 deaths in Rio de Janeiro between 1 January and 30 September, according to statistics published here, while in all of 1974 there were 417 fatalities during an epidemic of the disease, it was reported today. Woodrow Pantoja, Rio de Janeiro state secretary of health, rejected these reports, indicating that of 612 cases of meningitis recorded in the city of Rio de Janeiro during the first 9 months of this year, there had been 214 fatalities. In addition, Pantoja categorically denied the existence of an epidemic of meningitis meningococcus in this city. After stating that the presence of meningitis meningococcus has been declining since 1975, the health secretary said that the cases of the disease which have been reported in Rio de Janeiro have been caused by an as-yet unidentified micro-organism. [Excerpt] [Paris AFP in Spanish 2241 GMT 24 Oct 78 PY]

CSO: 5400

BURUNDI

HYGIENIC CONDITIONS INADEQUATE IN CHOLERA-STRICKEN AREA

Bujumbura LE RENOUVEAU DU BURUNDI in French 21 Jul 78 p 4

[Text] This is another in a continuing series of reports on the situation concerning the fight against cholera.

Those who still doubt the existence of cholera in our country must recognize it in order to carry out all the measures already recommended as a means of fighting the scourge. On Thursday, 20 July 1978, the press was on the spot and observed that the people still have much work to do in order to succeed in eliminating this sinister malady from our country.

Among the spots affected in Bujumbura, Musaga is the subject of searching questioning. This is not the sole affair of the Ministry of Public Health, but also involves the people of the district who must respond with their efforts. The aggravation of the situation has resulted from very precise causes: First of all, hygienic measures remain unknown in the area, and second, the lack of water can also affect the evolution of the disease. Consequently, health officials have deemed it necessary to set up a treatment center in Musaga due to the cases constantly developing there.

Since the disease reached the Musaga district, 90 cases have been recorded by the treatment center in the industrial quarter alone, with 3 deaths. At the present time, that center is accommodating 47 patients, but the others are being taken to the Gatumba and Muzinda treatment centers. When patients arrive at the treatment center, they remove their clothing so that it may be disinfected. Those accompanying patients undergo the same treatment and Fanasil is administered to them. We had the opportunity to question one of the patients and he mentioned the same symptoms of the disease as those outlined by the doctors: vomiting and diarrhea. However, in addition, persons suffering from cholera have no appetite and are constantly thirsty.

We would warn that the Musaga area will be a dangerous center if the people do not organize their fight against the disease. It is a district that has but one faucet which puts out only 1 liter of water a minute and there is always

a line of people waiting to use it. This may constitute an obstacle to all measures taken in the fight against the disease. Nevertheless, while the latrines set up in Musaga leave something to be desired, with the recommendations being given on the radio and in the newspapers, one can already see that the Abadasigana are organizing themselves in order to set up more facilities.

It is therefore by applying hygiene measures that one can hope to wage the fight successfully without running too many risks.

It should be emphasized that there are still persons not convinced that cholera exists. Others say that cholera can be quickly cured and that as a result, there is no danger in waiting 2 or 3 days. Curiously enough, they are forgetting their brothers who are suffering from the disease and seem unaware of the efforts being made by the health departments. Consequently, how can these people justify their lack of concern since the outbreak began? If we want cholera to disappear, we must strictly apply all advice furnished by the Ministry of Public Health, and for those who still do not believe that the disease exists, photographs may be used as proof. (ABP)

11,464

CSO: 5400

FIGHT AGAINST CHOLERA SHOULD BE GENERAL CONCERN

Bujumbura LE RENOUVEAU DU BURUNDI in French 26 Jul 78 pp 2-3

[Text] On 25 July 1978, a meeting of the National Health Council was held in the Foreign Affairs conference room.

The Council was set up by Presidential Decree No 100/82 of 1 August 1977 to replace the former National Hygiene Council on 4 April 1978.

The National Health Council is made up of general directors from most ministries and representatives of the religious organizations. Also invited to the meeting were the head doctors of medical regions and the WHO representative in Burundi. The meeting was presided over by Dr Barakamfitye Deo, general director of public health and president of the Council.

Everyone can undoubtedly guess the essential item on the agenda. Given the current state of affairs, the initial measures taken in the fight against cholera have proven to be more effective. There is now a 97-percent rate of cure. But why does cholera continue to spread despite the efforts made by the health departments? First of all, cholera always accompanies unsanitary conditions, the lack of latrines and the absence of drinking water. The fight against cholera is a social action par excellence. Consequently, the action of all persons or groups of persons would simplify the heavy task that is often thought to be the sole affair of the health departments. In the last 2 months, treatment centers have been set up nearly everywhere and there are now 12 small hospitals. For this reason, the people are urged to carry out very effective action in order to fight the disease inasmuch as during the rainy season, in view of how the disease is transmitted, the situation will be highly dangerous because most of the people get their water from the rivers. The health departments are not capable of seeing whether every home has a latrine. As a result, we are asked to help the health departments in order to share the task and achieve total elimination of the epidemic.

Coming after the Musaga area, which is a major problem, other areas of concentration have been noted because of the number of persons who have gone from Musaga to the commune of Mutambu and Kibumbu, transmitting cholera

directly. We know that new cases continue to occur. On 19 July 1978, the Kibumbu hospital admitted one patient and another on 29 July. Equipment and medicine were taken there to ensure disinfection and the treatment of persons exposed. It should be noted that the first patient came from Musaga on foot. On 19 July, the Rwibaga hospital admitted a man from the Mutambu commune. This man had been in Musaga selling mats. The Rumonge hospital reports that in Mukungu in the village of Babembe, there have been 3 suspicious deaths and 1 case hospitalized. It also reports 2 cases in Gatete. Gatete had had no new cases since 25 June, which means recontamination from the lake. In addition, Kabezi reports 11 deaths. Local departments had refused to believe in the existence of cholera and delayed in recognizing it.

Nevertheless, if the quarantine measures had been followed, cholera would have been stamped out. The problem is still that persons leave infected areas and carry the disease elsewhere. Quarantine measures are very important, especially with regard to persons who move about on foot. The administrative authorities have set up barriers, but it would seem that they are only for cars. Pedestrians go through the barriers without any control although they can well carry cholera germs. This is therefore the situation on 24 July 1978. From the beginning, the general total is 1,235 cases, with only 39 deaths. That is why the Ministry of Public Health believes that the measures taken and efforts made since cholera spread to Burundi have been crowned with success. Along these same lines, we must maintain and strengthen quarantine measures in order to limit movement between the different regions of the country and neighboring countries.

We must therefore emphasize the importance of the preventive measures, which are simple and practical, effective and accessible to everyone. They should not entail additional expenditures. These measures include avoiding the disposal of fecal materials on the surface of the ground. Instead, ditches should be dug. Flies can be fought by getting rid of garbage and used water from homes. Water not dangerous to health -- that is, treated water -- should be used. There are different procedures to follow, the most simple, effective and accessible one being to boil water. Hands should be washed regularly with soap, especially after going to the bathroom.

After reviewing the different measures aimed at preventing any spread of the disease and after noting the emergency measures already recommended by the health departments and the remarkable efforts of the information media, including the radio and press, to face the danger of cholera, every person must realize that he is personally responsible for the national campaign being waged.

Finally, the efforts of the entire population and the different departments must be combined. In order to confront the danger, representatives of the different ministries on the National Health Council have promised to support the various measures that will be taken by health authorities in order to eliminate the disease. (ABP)

BURUNDI

ROAD BLOCKS, HYGIENIC MEASURES NEEDED FOR CHOLERA PREVENTION

Bujumbura LE RENOUVEAU DU BURUNDI in French 31 Aug 78 p 3

[Text] Cholera struck our country about 3 months ago. Many measures have been taken since that time to halt its spread, but we must still make every possible effort because the fight continues.

A special measure has just been taken by the Ministry of Public Health in cooperation with the party and the local administration. This measure is poorly understood by the population because of the renewed outbreak of the epidemic.

First of all, it should be noted that the principle of the barriers remains. However, these open barriers were set up on the Bujumbura-Rumonge-Nyanza-Lake and Cibitoke-Bujumbura and Bujumbura-Bubanza routes, in addition to other barriers set up by other communes. In these places, the supplying of fresh food was banned. This ban was to have enormous economic implications for the population. The barriers were done away with in order to remedy this problem. Another thing that will be done will consist of isolating the hills affected but not an entire commune or an entire region as was previously the case. On the other hand, border barriers will be considerably strengthened in order to prevent any contamination from the outside, improving the organization of the border population in order to halt any person trying to cross.

At the time when the barriers are being opened up, a sector of Kamenge in the commune of Mutimbuzi was strongly attacked. The first reaction of the party administrative authorities and the Ministry of Public Health was to proceed to make thorough basic hygienic controls the rule, mainly the construction of latrines for every house. This work was completed during the past week, house by house. It was noted that few inhabitants of Kamenge had latrines. However, for the time being, the situation is considerably improved.

Along with this action, there has been a thorough explanation of additional hygienic measures, telling the population of Kamenge that cholera is a disease that strikes people who live in unclean conditions: Food must be

clean (only hot food should be eaten); hands must be clean, a rule that applies to everyone, especially children; cooking and eating utensils must be washed with clean water and soap; beverages must be clean; and finally, river water must never be drunk unless it is first of all boiled and it is not to be used in cooking.

Whatever the case, there are areas in which the disease is subsiding and others where it is breaking out again. A total of 14 health centers have existed from the beginning and another is being set up in Muramvya, where 2 cases have already been recorded. Another possibly dangerous source of contagion stems from a female victim of the disease who came from Tanzania on Saturday. She has already passed on the disease to 5 persons: 2 men and 3 women. The entire population must be reminded that hygienic measures have to be strengthened at all costs. Above all, we must not rest on our laurels, for the fight continues. Since the beginning of the epidemic, the general total is 3,137 cases, 2,877 of which have been cured and 101 of which have resulted in death.

11,464

CSO: 5400

BURUNDI

BRIEFS

WHO CHOLERA STATISTICS--It was announced Friday at the headquarters of the World Health Organization that the current renewed outbreak of cholera mainly seems to be affecting certain African countries such as Burundi, Zaire and Tanzania. According to the latest information received by the WHO this week, 136 new cases of cholera have been detected in Burundi, with 7 of the cases being fatal. Zaire has reported 49 new cases, including 3 deaths, and there have been 49 new cases in Tanzania, but no deaths. Since the beginning of June, the date when the epidemic began to develop in these regions, the number of persons affected has risen to 388 in Burundi, including 19 deaths, 120 in Zaire, including 72 deaths, and 265 in Tanzania, including 9 deaths. The "dirty hands disease" also affects other countries, particularly Bangladesh, Burma, India and Malaysia, but cholera has always been a scourge in these countries. In Thailand, the epidemic seems to be subsiding. In fact, the WHO has just taken numerous Thai provinces off the list of infected zones and the number of cases found dropped from 51 during the first week of July to 25 during the second week. In Hong Kong, a single case has been reported by the WHO. Indonesia is not mentioned in the WHO statistics, although the local press has told of 11 deaths since Monday.

[Text] [Bujumbura LE RENOUVEAU DU BURUNDI in French 22 Jul 78 p 5] 11,464

HEALTH SERVICES EFFECTIVENESS--It has been stated and repeated that cholera is a disease caused by unclean conditions. That is why people are constantly asked to fight this scourge by carrying out hygiene measures that have already been recommended. Since cholera appeared in our country, the health services have undertaken remarkable efforts to eliminate the epidemic. Treatment centers have been set up by the Ministry of Public Health in the different regions of the country where the epidemic has broken out or threatens to do so. At the present time, these small hospitals number 14, of which 2 have recorded only 4 cases cured since the outbreak of the disease. They are the Kibumbu and Rwibaga centers. From the beginning of the epidemic up until 31 July 1978, 1,530 cases have been recorded, including 54 deaths. Finally, in general terms, we can congratulate the efforts made by various officials aimed at eliminating cholera from our territory. However, we must not forget to maintain and strengthen the quarantine measures because it would appear that cholera is now extending to and spreading in Rwanda.

[Text] [Bujumbura LE RENOUVEAU DU BURUNDI in French 2 Aug 78 p 2] 11,464

COLOMBIA

MALARIA-DENGUE CAMPAIGN CHIEF DISMISSED

Bogota EL ESPECTADOR in Spanish 22 Sep 78 Sec A p 12

[Text] The minister of health, Alfonso Jaramillo Salazar, disclosed that the chief of that ministry's malaria eradication service has been declared discharged for having shown "marked negligence" in running the campaigns against dengue and malaria itself.

Jaramillo Salazar claimed that the malaria eradication service chief had 70 million pesos at his disposal for the purchase of palathion, and had not used the money; while the Council of Ministers had to authorize an appropriation for the purchase of the product, which is essential for the fumigation campaign.

He said that the machines required for the fumigation itself had been stored in a Bogota warehouse.

The minister spoke before the fourth committee of the House of Representatives, where he had been summoned to explain the action that the government has taken to cope with the problem of the dengue outbreak in the capital of Atlantico Department, as well as the hospital situation.

On Four Sides

Dr Jaramillo claimed that the problem is being attacked "on four sides," and that all the human, technical and economic resources that are necessary have been applied to it.

He said that 10 fumigating machines have already been imported, and that, within a period of 20 days, an additional 50 will be arriving; all of which will be incorporated into the same campaign against dengue on the Atlantic coast.

The head of the Health Ministry set a deadline of 15 days to have a well organized campaign established against dengue and its vector agent, not only in Barranquilla, but throughout the Atlantic coast as well. He said that this control would be constant in nature.

The official noted that dengue is not fatal, and explained that there had been some cases in which death occurred, but that this was due to the fact that the individual afflicted by the disease was suffering from some previous organic malady.

Minister Jaramillo Salazar also announced a widespread campaign against malaria.

2909

CSO: 5400

ASSAM FIGHTS AGAINST MOSQUITO-BORNE DISEASES

Madras THE HINDU in English 6 Oct 78 p 8

[Text]

Assam is currently engaged in combating malaria and encephalitis, both being mosquito-borne diseases.

Malaria, which was once supposed to have been controlled, has staged a come-back, and has taken a "serious turn", as stated by the Assam Health Minister, Dr. Kosheswar Bora, at the recent sixth North Eastern Regional Malaria Review meeting at Jorhat. And he pleaded for "all-out efforts" to tackle this problem.

In Assam the National Malaria Eradication Programme was launched in 1958. The result was encouraging and by 1965 the dreaded disease was largely controlled.

But with the reappearance of the disease in its virulent form in several parts of the country, and in view of the grave situation the Government of India had taken a revised strategy—'Modified plan of operation'. In Assam the modified plan is being implemented from 1977.

According to one source, in Assam about one lakh people suffer from malaria annually. And the situation has worsened because of the increasing trend of Plasmodium Falciparum Malaria cases (where the usual drug does not have any effect).

This resistant type of P. Falciparum cases have been re-

ported from various parts of the N.E. Region. Its presence has been confirmed in Karbi Anglong, Darrang, Garo Hills, Khasi Hills, Arunachal Pradesh and Mizoram.

In his address to the Regional Malaria Review meeting, Dr. Bora, pleaded for a co-ordinated operation against the disease by all the neighbouring States in the Region—Arunachal Pradesh, Nagaland, Meghalaya, Mizoram, etc, where in the dense forests, hills, lakes and ponds the mosquitoes found breeding facilities.

Recently the administrative set-up of the Malaria Eradication Programme in Assam was reorganised. Field laboratories have been set up in each primary health centre for quick diagnosis of malaria. And there is now the modified plan of operation.

While the N.E. Region is fighting P. Falciparum Malaria, the people of Assam, particularly in the Dibrugarh and Lakhimpur districts, are facing the ravage of virus encephalitis.

Encephalitis has already claimed about 150 human lives in the State and is gradually spreading to neighbouring areas causing panic to the people to whom it is still a 'mystery disease'.

Experts from the Indian Council of Medical Research and Virus Research Centre of Pune

have been making studies to diagnose properly the dreaded disease.

The disease is now mostly confined to Dibrugarh and Lakhimpur districts, but it is likely to spread to other areas. In fact, already some cases of encephalitis have been reported from the district of Kamrup, including Gauhati City.

The Gauhati Municipal Corporation has intensified its anti-malaria programmes in the city as a precautionary measure against encephalitis. The Corporation, however, is facing some difficulty due to shortage of spraying pump-sets, and so the spraying is initially being concentrated in the areas which are more vulnerable to mosquito breeding. Gradually the entire city of Gauhati is proposed to be covered.

The Corporation has requested the citizens to take preventive measures such as use of mosquito nets and curtains, spraying of insecticide in their compounds where possible and removal of cows, ducks and other domestic animals and birds from their compounds.

The district authorities of Dibrugarh and Lakhimpur are planning aerial spraying of DDT and other germicides in the paddy fields of the districts which are believed to be breeding grounds of the mosquitoes carrying the encephalitis virus.

INDIA

BRIEFS

CHOLERA DEATHS--Muzaffarpur, Sept. 27.--17 people died of cholera during the first half of this month in Kurhani block in Muzaffarpur district, according to the block Department Officer, Mr R. P. Shukla, reports PTI. He told the district authorities that the several panchayats in the block were affected. [Text] [Calcutta THE STATESMAN in English 28 Sep 78 p 8]

MALARIA IN NORTHEAST--Shillong, Sept. 29.--Mr Koseswar Bora, Assam's Health Minister, said at the sixth north-eastern regional malaria review meeting at Jorhat recently that there was a resurgence of malaria in the region. He added that a "modified plan of operation" had been taken up to control the disease. "Though a number of drug distribution and fever treatment centres have been opened in different villages, we should ensure that they function properly," Mr Bora added. Referring to the "ravages of encephalitis," the Minister hoped that experts would suggest ways of tackling the disease. The meeting was attended by about 70 delegates, including representatives from seven States of the north-eastern region. [Text] [Calcutta THE STATESMAN in English 30 Sep 78 p 5]

DIARRHEA KILLS 200--Patna, Sept. 30.--The Health Minister, Mr Jabir Hussain, said today more than 200 people had so far died of diarrhoea in the flood-hit areas in Bihar, reports PTI. Mr Hussain said there had been no report of outbreak of cholera in the State. [Text] [Calcutta THE STATESMAN in English 1 Oct 78 p 1]

ENCEPHALITIS IN NAGALAND--Kohima, Oct. 1.--Ten people died of encephalitis in Nagaland during the past week, reports UNI. The Deputy Director of Nagaland Health Services, Dr T. K. Das, told reporters today that all the victims were children below the age of three. The State medical department is taking preventive measures to stop the disease from spreading. [Text] [Calcutta THE STATESMAN in English 2 Oct 78 p 10]

POST-FLOOD DISEASES--There have been 113 deaths from cholera and gastro-enteritis in Midnapore and Howrah, it was reported in Calcutta on Thursday. Fresh floods occurred in parts of Howrah while Murshidabad was threatened by cyclonic weather. In Burdwan, the Ajoy and the Damodar were rising again.

The Chief Minister told reporters in Calcutta that the death toll, confirmed officially, had risen to 380. He said that the Hooghly district administration had reported to him that 65 people were missing. The Health Minister, Mr Nani Bhattacharya, said that the situation in Kolaghat was serious and that about 100 people died of cholera or gastro-enteritis in the area. The local primary health centre was still under water. A camp hospital had been opened to treat patients suffering from stomach ailments. The District Magistrate and the Chief Medical Officer of Midnapore had gone to Kolaghat. Mr Basu said that the situation in Kandi in Murshidabad district was alarming. Because of the rise in the water level of the Bhagirathi, Berhampore town was endangered. Bad weather prevented relief materials from being sent to Bharatpur in Murshidabad. [Excerpt] [Calcutta THE STATESMAN in English 6 Oct 78 p 1]

CSO: 5400

INDONESIA

BRIEFS

CHOLERA IN ACEH--Jakarta, October 12 (AFP)--At least 31 persons have died of cholera in the Pidie District in Aceh, North Sumatra, while more than 616 people were being hospitalized for the same ailment, it was reported today. Doctors assigned to work for the specially formed contagious disease eradication team were still wondering why the epidemic, which hit the area 4 months ago, was still raging unabated. Many other sufferers were being treated in small clinics throughout the Pidie District. But their number was not known, the report said. Head of the Sigli Central Hospital believed the epidemic was aggravated by the long drought which hit the area for the past 6 months and contamination of public water well system. [Text] [Hong Kong AFP in English 1125 GMT 13 Oct 78 BK]

CSO: 5400

JAPAN

FUNABISHI, INAZAWA REPORT CHOLERA CASES

Tokyo KYODO in English 14 Oct 78

Chiba 14 Oct KYODO--Local public health authorities began a disinfection operation Saturday in Funabashi following discovery of a confirmed cholera case in the city.

But the source of the germs and the infection route have yet to be determined, officials said.

A 66-year-old woman was diagnosed as a cholera patient Friday after complaining of diarrhea Tuesday.

Officials said there was a high possibility that the woman was infected by water contaminated with cholera germs because she had neither been abroad nor contacted persons who recently had.

According to the authorities, the patient called on friends and relatives in Iokyo's Taito, Sumida and Edogawa wards, during the week before developing diarrhea.

The authorities began health checks on persons who contacted the cholera victim and launched a disinfection operation in the vicinity of her residence in Funabashi, east of Tokyo.

Meanwhile, the Aichi prefecture public health institute reported Saturday that El Tor-Ogawa-type cholera germs were discovered during sampling at 12 places in Inazawa City, Aichi prefecture, where another cholera victim was found last week.

The 51-year-old man, who died Monday last week at a hospital, was later found to have a secondary infection of cholera.

The cholera germs were detected in two of 12 samples taken from drains near the patient's home and a hospital where he stayed.

The institute officials said there was little possibility that the infection would spread further because the sites have been disinfected.

CSO: 5400

MALAYSIA

BRIEFS

JOHORE CHOLERA AREA--Johore is now a cholera infected zone, according to a Singapore Government Gazette notification last night. [Text] [Singapore THE STRAITS TIMES in English 13 Oct 78 p 10 BK]

CSO: 5400

MOZAMBIQUE

VACCINATION CAMPAIGN PROCEEDING NORMALLY

Maputo NOTICIAS in Portuguese 20 Sep 78 p 2

[Text] As of Monday in the localities of Zitunde and part of Catuane in the Matutuine District, 11,463 persons--children, women, men, and the elderly--had been vaccinated as part of the National Vaccination Campaign that is underway throughout the country. The campaign began in Maputo Province on the first day of this month.

The above was learned by our reporters at the office of Dr Caseiro da Rocha, provincial director of health in Maputo. In their meeting with him, matters related to the final phase of the campaign underway in this province were analyzed.

Discussing the present situation in the National Vaccination Campaign, Dr Caseiro da Rocha explained that because of various kinds of difficulties encountered by the brigades operating in Tete and Gaza provinces, it is not yet known when the work in those provinces will be considered complete. The director emphasized, "It is known, however, that by the end of this October, vaccination work will be in progress only in the Maputo District." He emphasized that the work had been planned so that it could begin in Maputo Province before the rains could make it difficult.

Later on, he explained the pace at which work is proceeding in Maputo Province, saying that according to brigade members in Matutuine, the inhabitants of the zones already visited by the brigade have shown total support for the vaccination campaign. But he pointed out that there had been some difficulties because of the scattered population, with the result that the daily averages are lower than in zones where the population is more concentrated.

With reference to the makeup of the Maputo brigade, he said it consisted of 30 members, 10 of whom had also been part of the brigades that worked in the country's northern provinces. At another point, he said that the working method "is the most correct," since beginning in the cells and working up to the provincial level makes it possible for "people who were not reached during the operation within a particular zone to be reached when the brigade gets to the center."

Lastly, he emphasized that the brigade is accompanied by district political officials and the executive councils of the localities in question. This not only encourages the health workers themselves: it also stimulates the inhabitants to familiarize themselves with the objectives of the campaign, which are to insure the health of all.

11798

CSO: 4401

NEPAL

BRIEFS

CHOLERA IN BIRGUNJ TOWN--Katmandu, 14 Oct (AFP)--At least 15 people have died in a cholera epidemic which has affected the Birgunj Town area 180 kilometres (112 miles) south of Katmandu, it was officially reported here today. The cholera which spread 3 weeks ago in this important commercial centre bordering raxaul--India's northern railway head--has now turned into an epidemic. Over 250 people including women and children are now under going treatment at a local government hospital. The Birgunj municipality has banned the sale of fish, meat and other perishable foods as a measure to check the disease. Medicines and a medical team have already been rushed to Birgunj to help the local medical staff there, the official report added. [Text] [Hong Kong AFP in English 1408 GMT 14 Oct 78 BK]

CSO: 5400

BRIEFS

HEMORRHAGIC FEVER WARNING--The Health-Social Affairs Ministry issued a warning against Korean hemorrhagic fever yesterday as the season of vulnerability to the disease had arrived. The ministry instructed all the city and provincial health authorities to make lists of clinics and hospitals which had experience in treating hemorrhagic fever patients in the past for immediate treatment of possible sufferers in the days to come. Hemorrhagic fever, which has symptoms of high fever, vomiting and red spots on the palate, the armpits, and chest, usually affects people on mountains from late October through early December. The ministry said that people should not sleep on grass and should be careful not to expose themselves in paddies, fields and orchards. A total of 176 hemorrhagic fever cases occurred last year and killed 15 people, mostly in the Kyonggi-do area. Kyonggi-do and Kyongsang-pukto were most vulnerable to the disease last year, recording 74 and 67 cases respectively. Fifteen cases had appeared as of the end of last month this year and killed two persons in Kyongsang-pukto, the ministry said. [Text] [Seoul THE KOREA TIMES in English 6 Oct 78 p 7]

ENCEPHALITIS CONFIRMED--Two encephalitis cases have been confirmed in Cholia-puk-to for the first time in the province this year, raising the total number of encephalitis cases to 35. A five-year-old boy in Iksan-kun and a seven year-old boy in Changsu-kun have been found to be encephalitis cases. [Text] [Seoul THE KOREA TIMES in English 3 Oct 78 p 8]

CSO: 5400

THAILAND

BRIEFS

MALARIA FIGURES--The director general of the Communicable Disease Control Department has disclosed that Thailand now has at least 500,000 malaria victims and 5,000 of them die each year. He noted that for some reason, since 1960 malaria has tended to spread more widely, especially in Southeast Asia. [Bangkok Domestic Service in English 0000 GMT 26 Sep 78 BK]

MALARIA CASES--Malaria is increasing, due in part to inability to carry out eradication measures in communist-infiltrated areas, Dr Natda Siyaphai, deputy director-general of the Communicable Disease Control Department said yesterday. Dr Natda admitted that a halt to malaria eradication within communist-infested areas has become one of the main reasons for the increase in incidence of the deadly disease. In 1977, said Dr Natda, a total of 64,794 malaria cases had been confirmed by government-owned hospitals throughout the kingdom with 643 deaths. However, in the first half of this year, he added, 45,728 cases of malaria had been confirmed from government sources with 387 cases proving fatal. Dr Natda pointed out three major reasons causing the increase of malaria cases in Thailand: communist harassment obstructing malaria eradication campaigns in many areas, the lack of funds to fight the disease and technical problems. According to Dr Natda, quite often malaria eradication officials were harmed or abducted by insurgents during recent years. This has badly affected the morale of the officials. [Text] [Bangkok BANGKOK WORLD in English 30 Oct 78 p 3 BK]

CSO: 5400

URUGUAY

VACCINATION PROGRAM TO ELIMINATE RUBELLA

Montevideo EL PAIS in Spanish 20 Sep 78 p 5

[Text] In the immediate future Uruguay will eliminate the problem of rubella as it affects pregnant women.

Yesterday afternoon EL PAIS spoke with the acting minister of public health, Dr Jorge Nin Vivo, who said that his ministry had already made all the arrangements to handle the massive rubella vaccination campaign; the vaccine will be given to all women starting in adolescence.

This disease, mild in both children and adults, may be fatal if it affects the fetus during the first 3 months of pregnancy; it may cause congenital defects and in some cases, death.

Dr Nin Vivo said that steps are well advanced to bring to Uruguay in a systematic manner from year to year the necessary doses of rubella vaccine.

The acting minister said that at this time, from a general point of view, the nation's health situation is excellent. He noted that the Ministry of Public Health has received sufficient doses of polio vaccine, and that there are no shortages of any of the essential vaccines.

President to Open Health Center in Tala

On another topic, Dr Nin said that the hospital remodeling projects being conducted by the Ministry of Public Health in various places throughout Uruguay are proceeding without setbacks and are within the scheduled time periods.

He mentioned that the opening of the Tala Auxiliary Center is close at hand. This project was done in close cooperation with

the Canelones administration. He said that this Auxiliary Center will be officially opened by the President of Uruguay some time in October. At that time the president will also review a number of projects done by the Canelones administration.

Surgical Ward in the Minas and Melo Hospitals

On 12 October during the traditional "Lavalleya Week" that is held every year, the Ministry of Public Health will open the new health clinic of the Minas Hospital. This consists of rooms that will be used for surgery, maternity, and emergency care, and a general clinic.

The people of Lavalleya cooperated spontaneously, providing resources for the equipment of these rooms, which will be "excellently equipped," said Dr Nin.

In November the 1,200 square meter-building now being constructed at the Melo hospital will open.

The need for this project became apparent at the end of June 1977 during the visit by the entire government of Uruguay to Cerro Largo.

Last November work began and within 2 months a surgical ward with recovery facilities, a new pediatric facility, and emergency facilities will be available for patients.

At this time the MSP [Ministry of Public Health] officials are conducting interviews to hire the personnel needed to staff these structures.

Surgery Service and Ward in Bella Union

Another point mentioned by the minister of public health is related to the expansion of the old Bella Union Hospital.

In cooperation with the administration of Artigas and the strong support of the community (the firm CALNU contributed 300,000 pesos), the construction of modules began on 1 August. These modules will be incorporated with the old hospital one after another.

The use of modules instead of other types of construction is designed to supply vital medical services as quickly as possible. Construction of each module will take between 4 and 6 months, so the first module may open at the end of this year.

This first module will provide patients with a surgical ward and service in the Bella Union hospital.

Resources for the New Salto Hospital

In another part of the interview, the minister said that his ministry is working to provide essential resources needed in addition in order to begin as soon as possible the first of the three phases of the construction of the new Salto Hospital.

At present the Salto Hospital committee has over 4,000,000 pesos.

Work at the Maldonado Hospital

Later Dr Nin Vivo said that yesterday he was told that by the end of this month the concrete structural work will be finished for the new Maldonado Hospital, on which work began in July 1977. "The roofing work will begin immediately," he added.

On another subject, the acting minister of public health said that remodeling and maintenance work are being done without pause in various medical centers in Uruguay. "In Batlle y Ordóñez, for example, new general clinics, a surgery ward, and child-birth facilities are being constructed."

7679

CS0: 5400

URUGUAY

CAMPAIGN AGAINST HYDATIDOSIS DISCUSSED

Montevideo EL DIA in Spanish 23 Sep 78 p 10

[Article by Saul Pina]

[Text] Durazno. A year after the creation of the Departmental Commission to Fight Hydatidosis, information on its achievements during this period were released. In the police headquarters, the chief, Col Edmundo Suarez, the head of this commission, along with members of the commission, gave this report.

Fifty Percent of the Canine Population

It was reported that only 50 percent of the dogs in the department have been declared. The figure came to 6,838 dogs, while there are over 12,000. As to the Dronoit doses, to date 52,700 have been sold; it is hoped that this medication may be an effective treatment to control this disease.

As to the decrease in operations for hydatidic cysts, appropriate studies are being done in the Dr Emilio Penza Hospital, whose number is rather high. It was said that it is much too early to determine the results of this program, but it is hoped that the percentage of surgery will drop.

Acquisition of Dogcatchers Van

With the funds from the sale of Dronoit tablets, a vehicle was purchased that was totally overhauled and outfitted as a dogcatchers van. The people who work in the van received special training and have now caught about 50 stray dogs, which are kept for 48 hours, waiting for their owners to claim them, and then they are killed.

Program Will Continue

The next phase the commission will undertake will be the inspection of rural establishments, supplying information on the subject and trying to get owners to build modern slaughtering facilities. An intensive information program will continue. This will consist of showing slides and giving reports, especially in rural education centers. The full cooperation of the Primary Inspection and Police Offices has been received for this program.

Surgical Materials

Another action deserving attention by the commission is the acquisition of surgical instruments to be used in the operating room of the Dr Emilio Penza Hospital. The cost of this equipment is over 20,000 pesos, and the funds for its purchase will come from the sale of Dronoit capsules.

The Dr Emilio Penza Hospital now does two operations a month for hydatidic cysts.

Police headquarters receives three reports a day of dog bites in the public thoroughfares.

The members of the departmental commission said that it is essential that the population be made fully aware of the problem of hydatidic cysts, and the problem it represents both to human health and to the nation's economy.

7679
CSO: 5400

URUGUAY

BRIEFS

SHORTAGE OF MEDICAL SERVICES--"Each bed occupied by a patient in any Ministry of Public Health hospital represents a daily cost of 100\$N. A return to a close 'doctor-patient' relationship, which has been somewhat diminished by current technology, is necessary. There is an enormous shortage of professional hospital personnel as a result of economic factors." These comments were made by Dr Juan Carlos Salsamendi, director of the Ministry of Public Health Aid Division, Dr Juan Jose Bacigalupi, director of the Montevideo Department Center of the State Secretariat, and Aniceto Navarro Garcia, administrative director of the Aid Division. During the course of an interview granted to EL DIA, the experts analyzed the situation of the health sector, its shortages and the solutions which they are developing or applying. Basically, they concurred that for some time there has existed a lack of coordination between the various services, which impairs, delays and makes health care more expensive. [Excerpt] [Montevideo EL DIA in Spanish 1 Oct 78 p 10]

CSO: 5400

VIETNAM

BRIEFS

DAC LAC ANTIMALARIA EFFORTS--A survey conducted in late 1977 showed that 18 percent of the population in Dac Lac Province were affected by malaria. When the first phase of an antimalaria drive launched by the province since the beginning of 1978 was concluded, more than 2,800 malaria victims have been cured. Nearly 363,000 out of the more than 420,000 inhabitants in the province have been immunized against the disease and some 68,000 houses have been sprayed with DDT, while the number of people affected by malaria in the entire province has dropped to 11 percent. [Hanoi Domestic Service in Vietnamese 0900 GMT 14 Oct 78 BK]

CSO: 5400

WA BANS IMPORTATION OF BULK HONEY

Perth THE WEST AUSTRALIAN in English 4 Oct 78 p 23

[Text]

The WA Department of Agriculture has banned the importation of bulk honey from South Australia.

The move is aimed at protecting WA bee-keepers from a serious bee disease known as European fowl brood.

Honey dealers, however, are worried about the acute shortage of honey as a result of the ban.

"I cannot disagree with the decision, but we already have a grave shortage of honey in WA and this will make the position even worse," said Mr B. Clifton, general manager of the WA Honey Pool and State packer representative on the Australian Honey Board.

"We have not had enough honey to meet local market needs since last March.

"Supply sources alternative to those of South Australia are just not available."

Mr Clifton said he had never known of such a worrying situation in the local industry in the past 26 years.

Producers were in a serious financial situation.

The adverse seasonal conditions had caused extensive bee losses.

Under normal conditions, WA is one of the major honey-producing States, with significant amounts available for export.

However, for the past two years production has not been normal because of drought and damage by cyclone Alby.

UNAVOIDABLE

The Director of Agriculture, Mr E. N. Fitzpatrick, said yesterday that the ban on South Australian honey could not be avoided.

Fresh information from South Australia indicated that the disease situation there was worsening.

He had been advised by the SA Agriculture Department that the bee disease was recently found in parts of the State previously thought to be unaffected.

"In these circumstances, WA had no option but to regard all South Australia-

lian honey as suspect," Mr Fitzpatrick said.

"The danger to WA bee-keepers lay in the possibility that some would use this bulk honey to feed their bees during periods of low productivity.

"This poses a threat of introducing the disease and spreading it throughout WA, which is completely free at the moment.

"Queensland, Tasmania and northern New South Wales are free of the disease and bulk honey can be imported from these areas."

Mr Fitzpatrick said that the decision on the ban had nothing to do with a special meeting of WA bee-keepers in Perth last Sunday.

The bee-keepers expressed concern that the disease could be brought into WA through imported honey.

"Our decision is coincidental," Mr Fitzpatrick said.

BRAZIL

STATUS OF SWINE FEVER EPIDEMIC DISCUSSED

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 16 Sep 78 p 28

[Text] There is no doubt that African swine fever is present in Brazil, and the virus of this disease might have made its way into the country sooner than is officially admitted. The manner in which this pestilence arrived in Brazil is still unknown, but laboratory tests made recently on food remains taken from a Portuguese aircraft indicated the presence of the virus that causes African swine fever. The disease spreads so easily that even pigs born in the Zootechnical Institute of Nova Odessa, an organization of the Sao Paulo Secretariat of Agriculture, were afflicted. To furnish the result of a laboratory examination, technicians assigned this work on the Island of Fundao (State of Rio de Janeiro) can remain 2 months or 4 hours. The probability that the laboratory will err in its diagnosis is slight. In any breeding establishment the fact that one or more animals may die because of that disease does not necessarily mean that the others will also die. They can be carriers of the virus without presenting any symptoms of the disease. The official program aimed at combating the pestilence is ending up with the so-called "backyard breeders."

Here are some of the statements made day before yesterday in the evening by technicians connected with official organizations and private groups during a discussion on African swine fever sponsored by the Association of Agronomic Engineers of the State of Sao Paulo. According to Adolpho Menezes da Silveira of the Department of Coordination of Overall Technical Assistance (CATI), "what we have in Brazil is African swine fever itself." He pointed out that the specialists assigned the task of diagnosing African swine fever in the laboratory "know their subject well and leave no room for doubt." The others taking part in the discussion agreed with Silveira.

Exaggeration?

Claudio Lowenthal, representative of Elanco S.A., stated that the disease appeared in areas quite distant from Paracambi, the first-known focal point, and in places where there is normally no trading in pigs. For this reason, he believes that the disease was not disseminated "in the manner suggested

by the health authorities." Fernando Marrey, president of the Technical Commission on Hog Raising of the Sao Paulo Faculty of Agronomic Engineering, mentioned that 2 years ago hog producers complained to the Ministry of Agriculture about the lack of sanitary precautions in handling the remains of food brought by aircraft to the Galeao airport. He added that only 2 weeks ago incinerators were installed at that airport and that, recently, the Brazilian authorities found the African swine fever virus in the remains of food taken from a TAP [Portuguese Airlines] plane.

Jose Guedes Deak, representative of the Ministry of Agriculture, said that "the government is committed to eradicating the pestilence" and that the combative measures being taken "are the most efficient and correct." But Adolfo Correa, agronomist representing Santa Catarina breeders, criticized the closing of that state's borders, because that measure paralyzed the state's hog trading. He said that Santa Catarina sells 850,000 head of hogs per year and that, because of the combat measures taken by the government, the price of the product per kg dropped from 13 cruzeiros to 10 cruzeiros and even, in some instances, to 7 cruzeiros. He also criticized the fact that the government did not immediately decide to stock pork. Fernando Marrey said that the eradication measures "are sure but slow" and stated that "it is not the pestilence that is killing Brazilian hog raising but, rather, bureaucracy."

Benefits

Francisco Fazzano, also from CATI, said that domestic hog raising should now improve greatly, because "only technically prepared breeders will be able to survive." He said that the "backyard breeder, the one who fed the animals food remains and garbage," is being eliminated. Two agronomists attending the meeting objected to Fazzano's position stating that it is not possible just to eliminate a source of protein from the poorest people in a country where the income is so low. The representatives of CATI and the Ministry of Agriculture said that they are not against the "marginal producer," but they stressed the danger that a lack of minimal hygienic conditions among those breeders represents for public health; they added that the government is studying a way to support small hog breeders.

Claudio Andrade, virologist responsible for the official diagnoses of the African swine fever, explained that the delay in disclosing the results of the examinations is due principally to factors such as bad conditions for preserving the material to be analyzed, a delay of up to 25 days for the material to arrive at the laboratory, and also to the accumulation of work ahead of the researchers.

There are regulations put out by the Ministry of Agriculture as to the preparation of the samples going to Rio de Janeiro. But, according to Claudio Andrade, those recommendations are not always obeyed, and the material arrives in an advanced state of putrefaction or preserved in nonrecommended substances (such as glycerine or formaldehyde), which either makes it difficult to analyze the material or requires more time to obtain the result. He added

that coding the samples precludes any "error in the result" and that the analyses, made several times with the same material, "practically eliminate any error in the diagnosis."

According to information furnished by the Ministry of Agriculture, 43 concentrations of African swine fever have been identified in the State of Sao Paulo confined to the breeders of 29 municipalities. Due to this disease 6,661 hogs have been slaughtered in the state up to now and the government has paid breeders 3,812,030.80 cruzeiros in compensation.

8568

CSO: 5400

CHAD

BRIEFS

ANTIRABIES MEASURES--In order to call the Ndjamena townspeople's attention to the danger of spreading the rabies due to the rapidly increasing number of stray dogs, the minister of public health, labor and social affairs reminded them of the terms of communique 527/DSP/BT of 14 Jun 78. Sector 1 on large-scale Endemic Diseases in Ndjanena has been recording several cases of bites from dogs suspected of rabies. Decree 468/EL of 27 Feb 61 in several articles stated that the Republic of Chad in particular is continually infested with rabies and provides for the slaughter of those stray dogs which cannot be kept under control. Owners of domesticated animals are therefore earnestly requested not to allow them to roam about the public thoroughfares, to have them vaccinated at Veterinary Stations and to exterminate at birth puppies and kittens they do not intend to keep or for which there is no owner. I appeal to your sense of civic duty to comply strictly with the recommendations which will enable us to steer clear of serious accidents which we are more and more frequently witness to. [Text] [Ndjamena INFO TCHAD in French 9 Sep 78 p 4] 8870

CSO: 5400

LAOS

BRIEFS

LOUANG NAM THA VETERINARY WORK--At the beginning of last month the veterinary service personnel of Louang Nam Tha Province carried out an anti-cholera campaign among the animals belonging to the population of the Meaung Sing and [Meuang] Nam Tha districts. During this period more than 3,000 oxen, buffalo, horses and many thousand head of small livestock were vaccinated. At the same time the cadres of this service gave out information to the local inhabitants regarding prophylactic measures. [Text] [Vientiane BULLETIN QUOTIDIEN in French 14 Aug 78 p 4] 7993

CSO: 5400

MADAGASCAR

GOVERNMENT DRIVE TO STOP RABIES REPORTED

Preventive Measures Described

Tananarive MADAGASCAR-MATIN in French 16 Sep 78 p 2

[Article by P.R.: "A Critical Situation: Rabies Is an Epidemic"]

[Text] The national sensitization campaign to fight against rabies will begin next week throughout the entire country.

In Madagascar, rabies is currently creating a critical situation because the disease has become an epidemic.

Tananarive Province as a counterpart to its cleanliness campaign, will also participate in the sensitization campaign to combat rabies.

As early as last 29 August, during the meeting of the province's CE [executive committee] board, a provincial committee to fight against rabies was set up, chaired by Jonah Rakotoarivelo and made up of representatives of the province's departments of Health, Animal Husbandry, Population and Social Welfare, Information, Justice, and representatives of the ZP [national gendarmerie] and decentralized communes.

In addition, each of the province's 19 towns and cities established similar committees.

Warning Against Dogs

In the opinion of Dr Ramanda Ratovondrahona, veterinary superintendent in the province's department of Animal Husbandry, the committee's function is to sensitize public opinion regarding the detrimental results of this dangerous disease which is usually transmitted by a bite. It is especially dangerous since the common carriers of the rabies virus on the Big Island are two animals that we value highly: dogs and cats that we should have vaccinated periodically.

It should be pointed out, however, that all warm-blooded animals and human beings can be stricken and thus can transmit it.

Tananarive Hard Hit

Some 80 percent of the cities and towns of Tananarive have recently been hit by this disease: particularly Antananarivo I, Avaradrano, Atsimondrano, Arivonimamo, Antsirabe, Tsiroanomandidy, and Anjozorobe.

Everyone should therefore take preventive measures, first of all by having their domestic animals (dogs and cats) vaccinated periodically, especially since the incubation period of the disease varies from 15 days to...a year.

Two types of vaccine are suggested, according to the breed of dog. The "rabiffa" vaccine, passive and imported, is used for so-called "show" dogs six months and older. It is good for a year and is given in two injections one month apart. The "Lyorab" vaccine, manufactured in Ampandrianomby, is live and attenuated. It lasts from 30 months to three years and is given in one injection.

These vaccinations are given either in Mahamasina-South or in Ampandrianomby. An international antirabies vaccination certificate is given out.

This caution is necessary for, as we have said, the incubation period for rabies varies considerably. Furthermore, this is the first goal of this national campaign, to make owners aware of their duties toward their domestic animals and their fellow citizens, the prospective victims of their dogs.

In the opinion of Dr Ramanda Ratovondrahona, starving, stray dogs are the ones which transmit the disease to others of their kind and human beings, primarily by biting them or by the air they breathe.

Such is the case for Antananarivo I. Numerous dogs from the surrounding outskirts (Avaradrano and Atsimondrano) have overrun the city in search of food and have transmitted the disease. At the same time, the number of persons bitten by dogs has noticeably increased. The Pasteur Institute is currently registering in one day more persons than were being treated previously in one month.

Nightly Dog Removals

For this reason, for three days next week, Tananarive's provincial department of Animal Husbandry is going to resume killing dogs at night with poisoned bait.

This is the second goal of the campaign.

There is another preventive measure to be taken. Every person bitten by a dog should go immediately to the Pasteur Institute (or the office of the nearest medical district) to be treated with serum vaccine.

If the animal is not identified, the victim must undergo a 14-vaccine treatment with three booster shots.

In the event the dog is identified, the latter is put under observation for two weeks by the province's department of Animal Husbandry to look for rabies symptoms. If there are none, the treatment of the victim is stopped and a certificate is given to the animal's owner.

We should mention that the decentralized communes, at their respective level, are participating in this campaign to sensitize people, among other things by helping those in charge sensitize the rural collectives and remove dogs. Some, in addition have created a tax on dogs as an incentive to the owners to feed their dogs adequately. Others are checking antirabies vaccination certificates. Moreover, the citizens of Tananarive are becoming more and more concerned with the fate of their dogs by taking them to be vaccinated in Mahamasina-South.

Removal of Dogs Defended

Tananarive MADAGASCAR-MATIN in French 20 Sep 78 pp 1,2

[Article by E.M.: "Rabies: People Are Not Taking It Seriously"]

[Text] "We are not the accomplices of thieves; the removal of dogs and the campaign against rabies have proven necessary," Dr Raharijaona, head of the department of Curative Medicine in the ministry of Health and one of the primary persons in charge of this campaign, told us.

Public opinion, he said is somewhat reluctant regarding this campaign, arguing among other things that dogs are very useful against thieves. However, the facts have to be taken into account. The canine population (particularly that of strays) has increased considerably for the simple reason that the routine killing of dogs before 1972 has been abandoned in the last few years, the revolutionary authorities having other, more urgent problems to face and other pressing matters to take care of.

They Amount to Packs

The situation is alarming. The rabies epidemic has become nationwide. The whole country has been hit by the disease. Reports coming from various cities and towns (Inosy, Ankilizato, Morondava, Ambalavo...) note the presence of what amount to packs of stray dogs, which attack livestock (these packs even infiltrate enclosed pastures and pigs) and transmit rabies to cows and pigs. The economic disaster that will follow if we do not put an end to the overpopulation of dogs can be imagined.

Other facts also provide proof of the seriousness of the situation. The fresh outbreak of rabies is going on at a "galloping" speed. The number of cases declared during the first half of this year corresponded to the number of cases declared for the entire year of 1977. There has been a distinct increase, on the one hand, in the number of positive results (finding rabies virus in the brains of suspected dogs) and therefore in the number of mad dogs, and, on the other hand, in the number of persons bitten, the result of which is an increase in the incidence (number of registered cases) of human rabies.

In our country, one fact stands out. Dogs remain the principal reservoirs of the virus and the principal carrier of the disease. We should not forget, however, that all warm-blooded animals can get rabies and spread it. For this reason, we should not wait until the disease has spread to blot it out. Just imagine the situation if rats were contaminated and also became reservoirs and carriers of the disease, Dr Raharijaona told us; the fight would then be much more difficult, if not impossible. For this reason, we have to seriously come to grips with the evil as of right now, while it is still possible to and before it is too late.

National Committee

We should not forget that the removal of dogs was supposed to begin officially the day before yesterday and end tonight for the whole country, in conformance with an interministerial agreement on the fight against rabies drawn up in August of this year. A national committee, chaired by MDRRA (ministry of Agriculture and Animal Husbandry) and made up of representatives of the ministries of Health, Population and Social Welfare, Information, Justice, and representatives of the gendarmerie and the decentralized communes, was set up. Identical committees were also set up at the provincial and urban levels in the six provinces and the towns and cities (see, on this subject, the article on the fight against rabies in the province of Tananarive in our Saturday edition).

The method selected to remove dogs was that of poisoned bait. The rural collectives are supplying the bait (meat scraps, bones, food leftovers); the state, the poison; and the veterinary department is taking charge of the preparation. The last step is important because the poison used is unusually strong. A dog that eats 50 grams of the product will not go more than five meters before dropping dead in his tracks.

The Major Role of the Rural Collectives

A major responsibility falls on the rural collectives. Their role is to watch the places where bait is put and to collect and destroy the bodies of dead dogs. They are assisted in these tasks by representatives of the technical departments concerned.

In the provinces, Dr Raharijaona again told us, the dog removal project is resulting in a genuine mobilization. In Ambositra, for example, those locally in charge are combing the city with loud speakers to warn, motivate, and sensitize the inhabitants. After the current campaign, another national campaign will take place in mid-November; then removing the dogs will be up to the diligence of the rural collectives and the decentralized communes.

It should be pointed out that the articles in force require a minimum of two dog killings a year. The rural collectives, however, will be able to carry out several, according to their needs. The national campaign to stop rabies is only an alarm bell; the fight against rabies should, on the contrary be henceforth carried out on a permanent basis.

DECREASE IN MALARIA, CHOLERA, DENGUE RATES

Sharp Drop in Malaria Cases

Kuala Lumpur BUSINESS TIMES in English 8 Sep 78 p 4

[Text] **MALARIA** cases in Peninsular Malaysia dropped sharply from about 400,000 cases 10 years ago to about 14,000 cases last year, the Parliamentary Secretary to the Ministry of Health, Encik Jawan Empaling said yesterday.

Most of the malaria cases occur in the new land scheme areas, Orang Asli settlements, security areas and other areas with moving population, Encik Jawan said.

He was speaking at the opening of the WHO regional course in malaria epidemiology and control, at the Public Health Institute yesterday.

He said some of these problem areas are still under the attack phase of the malaria eradication programme.

Refresher courses, orientation courses, seminars and workshops are organised biannually by the institute for people working under the MRP, Encik Jawan said.

These training courses are meant purely to up-date the skills and knowledge of the staff on the anti-malaria measures and to get a feedback on the problems in the field.

Encik Jawan said malaria seemed to be coming back as a health problem in many parts of the world, including some countries in Asia.

He hoped the regional course would discuss this particular problem with a view to formulating counter-measures.

Twenty-five participants and four observers from 12 countries including two WHO member countries of South-East Asia are taking part in the three-week course.

No Cholera, Dengue in Sarawak

Kuala Belait BORNEO BULLETIN in English 9 Sep 78 p 1

[Text] **KUCHING.** — Sarawak has been free from cholera since November last year, Mr Tan Yaw Kwang, the state Director of Medical Services, said this week.

The seven months before that, however, had seen 240 cases reported, with nine deaths.

The state has also been free from dengue fever this year, and since 1970 only five cases have been confirmed in Sarawak.

This good record can be maintained only if people continue to maintain high standards, of personal hygiene, Dr Tan added.

They must take care to keep their surroundings free of possible mosquito breeding grounds, such as old tins or tyres.

CSO: 5400

BOVINE PLEUROMONIA KILLS 40 HEAD OF CATTLE IN GONGOLA STATE

Kaduna NEW NIGERIAN in English 9 Oct 78 p 32

[Article by Ibrahim N. Salihu, Yola]

[Text]

OVER 40 head of cattle have so far died of bovine pleuromonia in Gongoshi, Yola Local Government area of Gongola State.

Speaking to the New Nigerian in his office, the Chairman of the Local Government Council, Alhaji Hamman Gabdo Mustafa, stated that the disease was reported from Mayo-Belwa Local Government area.

He explained that three steps had already been taken. He said quarantines had been created for cows already affected; those suspected to have contacted the disease and those not affected so far.

Similarly, inoculation of all the three groups of cows had been embarked upon with a view to eradicating the disease, adding that the operational areas for the inoculation exercise had been divided into three zones of Ngurore, Wuroboki and Gongoshi.

The chairman narrated that when the disease was spotted in the area, he immediately sought the assistance of a government veterinary officer.

At the scene, he said, one of the cows affected was slaughtered and its lungs were examined and found to have the symptoms of the dangerous cow disease.

He said the cows belonged to some Fulanis who moved from the savannah area through Karim Lamido and then settled between the border of his LGA and that of Mayo-Belwa.

Alhaji Hamman Gabdo Mustafa told me that he had already instructed some of his council officials to be on the guard so that none of the cattle Fulanis whose cows were affected sold them in the nearby market.

He also appealed to people in the area to watch out for such suspicious cases of the disease and report to the authorities.

When contacted at the headquarters of the Ministry of Natural Resources, a veterinary officer showed me one government Peugeot Pick-up and said: "I am travelling out on duty, so I can't see you now."

BRIEFS

RIFT VALLEY FEVER WARNING--Cases of Rift Valley Fever are expected to occur in the coming rainy season, the director of Veterinary Services warned yesterday. Farmers in affected areas, mainly Karoi, Sinoia, Mangula, Banket, Norton, Beatrice, Hartley, Gatooma and Nyamandhlovu, are advised to vaccinate their stock. [Text] [Salisbury THE HERALD in English 17 Oct 78 p 3]

CATTLE DEATHS--More than 250,000 African-owned cattle died in Rhodesia's tribal lands last year, and more than 500,000 are expected to die this summer, Mr Eddie Cross, a chief economist of the Agricultural Marketing Authority, said in an interview yesterday. The cattle deaths--due to tick-borne diseases and trypanosomiasis--represented an income loss to the tribesmen of \$27,500,000 last year. This year's financial loss is expected to be double. "And there is absolutely nothing that can be done about it until the war ends and veterinary services are restored in the tribal areas," he said. The AMA is not allowed to hold cattle sales in disease-affected areas because all movement of cattle there is prohibited, he said. Plummeting cattle revenue was one of the major problems confronting African farmers, and the AMA, Mr Cross said. Another was the marketing of their groundnut crop. This is a very important tribal crop--and a situation has arisen where, through shortage of cash, the tribesmen are eating their potential income. If the flow of income from cattle sales was normal, they would have enough cash to shop around for other food, he said. Instead, they like groundnuts, and eat them. "Their sales of groundnuts have fallen, and there is no alternative source of income." Answering a question, he said tribesmen grow "a substantial quantity" of soya beans, but do not care to eat these. [Text] [Salisbury THE HERALD in English 17 Oct 78 p 2]

SPREAD OF RABIES--The war, for instance, has meant the spread of rabies. Government teams used to visit tribal areas at least twice a year to inoculate dogs. With the heavy terrorist infiltration of the tribal lands, this has had to be stopped--and so the rabies menace has grown. The problem is particularly serious, said Mrs Allison [RSPCA national secretary], in areas near the borders with Mozambique and Botswana. "There have been a number of cases in Umtali and round the Plumtree area, and I understand one case has been reported in Salisbury." [Excerpt] [Salisbury THE HERALD in English 19 Oct 78 p 9]

VACCINE HAS SHORT LIFE--The vaccine for Rift Valley Fever has a relatively short life, so large stocks cannot be carried and manufacturers cannot supply large quantities at short notice, the Director of Veterinary Services has said. Further to his warning published yesterday, that cases of Rift Valley Fever are expected to occur in some areas in the coming rainy season, the Director urges farmers to place orders now at the Veterinary Research Laboratory or at their provincial veterinary office so that adequate stocks can be obtained. Farmers are asked not to place excessive orders, otherwise there will be a surplus and a waste of foreign exchange. The main affected areas are: Karol, Sinoia, Mangula, Banket, Norton, Beatrice, Hartley, Gatooma and Nyamandhlovu. [Text] [Salisbury THE HERALD in English 18 Oct 78 p 7]

CSO: 5400

URUGUAY

MEASURES TAKEN AGAINST SWINE FEVER IN RIVERA

Montevideo EL PAIS in Spanish 24 Sep 78 p 9

[Article by Martin Correa]

[Text] Rivera. It was officially announced that next Monday a door to door campaign will begin to determine that there are no pigs in this department, like those in the bordering regions, in this way avoiding a possible outbreak of swine fever.

At the same time, today the Department of Agriculture of the State of Rio Grande do Sul said officially that the ban on pigs had been lifted in this region, and effective today, all producers or persons interested in removing or selling their animals could do so anywhere in the state without difficulties.

The health authorities are remaining attentive and watchful in these circumstances. Dr Getulio Marcantonio was consulted on this lifting of the official prohibition; he said that the fact that sources of swine fever had been found in Tres Passos automatically caused this ban to be canceled.

All this means, in accordance with the "Control of African Swine Fever" program, that while the health authorities will have to continue their observations, pigs can now be moved, which could not be done before.

So that the readers of EL PAIS will have a good idea of what is happening, this correspondent interviewed a group of pig farmers in Livramento, who said: "For us, with all due respect for the preventive measures, which always have to be observed, we understand that the African swine fever problem fortunately is not as bad as was thought at first. So all along the

highways and roads you see animals out loose, and none of the tragedies predicted by the experts have happened, luckily. For us everything is absolutely normal. Here in Livramento, as in Rosario do Sul, San Gabriel, Quarai, Uruguayana, Don Pedrito, pigs are being sold without any sort of problem. And there is great acceptance by the public. People are buying them because they are healthy products, and in all sincerity we don't see anything like what the media have been reporting."

7679

CSO: 5400

'TOUGH MEASURES' NEEDED TO CONTROL AFRICAN SWINE FEVER

Lusaka TIMES OF ZAMBIA in English 15 Oct 78 p 1

[Text]

AFRICAN swine fever which has created havoc in the Eastern Province will not be wiped out unless tough measures are taken, director of veterinary and tsetse control department, Dr George Akafekwa, has said.

He explained that the "barrier" at Luangwa River bridge would continue because there was neither vaccine nor treatment for the disease.

There have been persistent complaints from travellers that they were being made to throw away food, even chicken, when crossing the bridge.

Speaking in Lusaka, Dr Akafekwa stated that the only recommended control measure of wiping out the fever — the slaughter of all pigs in an infested area — could not be applied in the province because of wild pigs which continued to spread the disease.

Besides, it would involve a lot of money to compensate for the slaughter of the province's 80,000 pigs.

"At the moment, the best we can do is to try to limit the outbreak of the disease so that it doesn't affect the whole of the Republic," he said.

Although the disease was not communicable to human beings, it was dangerous in

that its mortality rate was about 95 per cent when it freshly attacked an area where pigs were reared.

Asked whether the pork processing plant being constructed in the province would not be affected by the disease, Dr Akafekwa said it would only provide a market for pig owners there.

But he cautioned: "Virus in pork can only be killed at a temperature of 140 degrees Fahrenheit."

In some countries, Dr Akafekwa noted, anyone wanting to rear pigs had to satisfy the government that he would provide enclosures for his animals to check swine fever.

BRAZIL

CATERPILLARS ATTACK 2 MILLION COFFEE PLANTS IN PARANA

Rio de Janeiro O GLOBO in Portuguese 3 Oct 78 p 21

[Text] Porecatu, Londrina (O GLOBO). The attack by three species of caterpillars--which, as of yesterday, had hit 2 million coffee trees on the plantations owned by the Central Plant of the Atalla group in the township of Porecatu (northern part of Parana)--was caused by the excessive application of insecticides in the fight against the leaf miner.

This happened because, due to the long drought over the first 5 months of the year, there was a noticeable increase in the leaf miner population and the applications of insecticides used in fighting against it were increased from four to ten applications during the 1977-1978 harvest. In view of this, agronomist Mario Tanaka, head of the Agronomic Division of Central Plant of Parana, of the Atalla group, believes that the excess of insecticides used in the fight against the leaf miner caused the deaths of the natural enemies of the caterpillar.

"As a result of the death of its natural enemies, the caterpillar population increased rapidly and in less than 90 days the caterpillars had already attacked about 2 million coffee trees," he explained.

Under Control

A week ago, agronomists decided to experiment with a biological insecticide based on the bacillus fugienis, producing good results "both in the fight against the leaf miner," said Tanaka, "and with relation to caterpillars."

Mario Tanaka emphasized that the problem is under control and that it will be difficult for the caterpillars to spread throughout the region. "Unless, of course," he warned, "other growers made the same mistake we did in using too much insecticide."

The technician also said that, by virtue of the circumstances, the blooming of the coffee plantation "so far has been good." However, agronomists admit that the problems will noticeably influence the coffee output of the plantations belonging to the UCP [Central Plant of Parana]. "We have 4.7 million

coffee trees in full production," said one agronomist, "which, in normal times, would produce about 125,000 sacks of clear [clean] coffee. During the coming year, we hope to harvest at least 100,000 sacks but, because of the countless problems faced by this crop, we should harvest at most 40,000 sacks--and that is an optimistic estimate."

Agronomic Institute

Yesterday afternoon, technicians from the IAPAR (Agronomic Institute of Parana), based in Londrina, announced that the caterpillar attack has not been detected anywhere else in the region although it was intensive on the properties of the Atalla group.

This assumption however cannot be ruled out completely because, according to some technicians from the agriculture secretariat, the attack of the leaf miner this year on the coffee crops is intensive, something which inevitably will cause the growers to use more and more insecticides, thus in turn bringing about the death of the caterpillar's natural enemies.

Technicians from the agricultural secretariat warned that, in spite of the fact that the attacked plantations have been properly advised, neither the IAPAR nor the IBC [Brazilian Coffee Institute] took steps to alert other growers to the problem.

In the meantime, Parana agriculture secretary Paulo Carneiro Ribeiro himself, on Friday, after being briefed on the problem, through the communications media in the northern part of Parana asked that growers who become aware of the existence of the attack of caterpillars upon their coffee plantations inform the technicians from the secretariat. On that day, the secretary said that the problem has caused serious concern and that the IAPAR would have to come out with a statement on the methods to fight this scourge.

The IAPAR announced that, along with the satuniata species, admissions collected two other species of caterpillars, as yet not identified, which made the situation worse in terms of determining an effective control method.

According to the technicians, the entomological section of the IAPAR is conducting research on the biology and behavior of these caterpillars and has begun to breed those insects in the laboratory for tests using insecticides. The technicians also recall that the caterpillars never before were "described as coffee plagues but occasionally turned up in fruit trees and on forest trees."

5058

CSO: 5400

CHAD

OCIALAV CLARIFIES LOCUST SITUATION

Ndjamena INFO TCHAD in French 28 Aug 78 pp 2-4

[Article: "OCIALAV Clarifies Locust Situation" quotes letter to editor from Palouma Abou, deputy chief, Chad-Cameroon Group of OCIALAV]

[Text] The following letter was addressed to us by the deputy chief of the Chad-Cameroon Group of [OCIALAV] Joint Anti-Locust and Anti-Aviarian Organization relative to our articles of 18 and 21 August on the locust plague:

"I refer to the following articles:

- 'Locust Invasion North of Ndjamena: 15,000 Hectares of Fields Devastated,' of 18 August 1978; and
- 'Locust Invasion North of Ndjamena: OCIALAV Can Do Nothing but Report Damage,' of 21 August 1978.

Despite our various endeavors to set matters straight on the grasshopper situation at Massaguet and Massakory, the information has been totally distorted by the ATP [Chadian Press Agency] and the radio. Let me say from the start that the problem is one of swarms of grasshoppers or sedentary locusts, and not of migratory locusts as these two information organs have led the people to believe.

These false alerts in regard to migratory locusts have upset not only the people of Chad, but also those of all the African countries concerned over this plague.

The facts of the situation at Massaguet and Massakory are summarized as follows:

The first early monsoon rains brought about the arrival of grasshoppers or sedentary locusts in the Massaguet and Massakory sectors. The farmers were unable to treat the small areas occupied by the larvae immediately for lack of HCH which is usually sold in the stores of ODNR [expansion unknown]. Thus the grasshoppers multiplied and their density rapidly reached between

20,000 and 100,000 insects per hectare, mixed occasionally with a very small number of African migratory locusts. Since June, these grasshoppers have been attacking the millet seedlings, sometimes compelling the farmers to re-sow their fields 2 or 3 times.

In this situation, OCLALAV was called in on 6 July 1978, and on 7 July it dispatched an exploratory team and an exterminator team to Massaguet and Massakory.

The explorations effected between 7 and 18 July by this OCLALAV team together with the chief of the ONDR Massaguet subsector revealed about 15,000 hectares swarming with grasshoppers (crops and uncultivated ground).

OCLALAV started treatments on 15 July 1978 which have continued through the present. More than 16,000 hectares have been treated using insecticide-spraying equipment attached to the exhaust pipes of vehicles. The work has continued despite the difficult terrain conditions produced by the heavy rains.

The situation described by the above-cited articles is perhaps that of June. In August, the crop damage was much less as a result of our intervention and of the presence of tender young new grass vegetation. A way must be found immediately to make HCH available to the farmers, which is indispensable for effective protection of their millet crops at ripening time (September).

The fight against grasshoppers depends primarily on the farmers themselves, who must protect their fields by treating them with HCH immediately upon the first appearance of grasshopper larvae.

In the fight against grasshoppers, OCLALAV can assist with explorations, but it cannot intervene unless the situation gets beyond the control of the farmers and the national vegetation conservation service, and unless the affected areas are large enough to permit the use of vehicular or airborne spraying equipment.

OCLALAV, an inter-country organization, must in no way be confused with ONDR, the Chad national service, which engages in totally different activities.

For the Group Chief:

The Deputy Chief,

Palouma Abou

9238

CSO: 5400

COSTA RICA

BRIEFS

BANANA DISEASE OUTBREAK--The "moko" banana disease outbreak is large and is also affecting Los Diamantes experimental station. Official Agriculture Ministry reports say that the outbreak on the banana plantations has affected several large farms as well as many small producers. The ministry has established quarantine posts to halt the spread of the disease while it is being eradicated. [San Jose Radio Reloj in Spanish 0100 GMT 25 Oct 78 PA]

CSO: 5400

OUTBREAK OF SEPTICEMIA AMONG CATTLE

Kuala Lumpur NEW STRAITS TIMES in English 4 Sep 78 p 7

[Text]

SEREMBAN, Sun. — At least 16 more buffaloes and three cows have died in the Labu Estate, about 14 miles from here, and its surrounding area over the past few days following an outbreak of disease.

This brings the total number to 20 buffaloes and six cows that have died so far since the outbreak of the cattle disease last week.

A Veterinary Department spokesman said preliminary laboratory tests showed an outbreak of haemorrhagic septicemia (a form of blood poisoning) among the animals.

"However, we will have to wait for a few days for the animal inoculation tests to be completed to confirm it," he added.

He said the situation was under control. The the State Veterinary

Department had launched a widespread vaccination campaign at district level to prevent the disease from spreading.

"This is the first time Negri Sembilan had been affected by the disease, and we have taken preventive measures to curb it from spreading any further," he said.

So far, about 450 cattle had been vaccinated and we will continue our campaign in other parts of the district over the next few days.

He appealed to cattle owners to contact the department if their animals were sick so that they could be vaccinated.

"For the time being, cattle should not be allowed to associate with other animals, and owners should also take care to see that their cattle do not stray into other areas," he added.

CSO: 5400

DRIVE TO CONTROL LOCUSTS UNDERWAY

Karachi THE SUN in English 3 Oct 78 p 5

[Text]

LAHORE, Oct. 2: Pakistan army, Punjab Agriculture Department, Rangers and Revenue Department are busy in eliminating locusts in Bahawalpur, Bahawalnagar and Rahimyar Khan areas.

The government has sanctioned Rs.eight lakh for the operation and provided jeeps and three aircraft for spraying purposes in this connection.

The secretary, Agriculture, Punjab, told PPI that five locust swarms entered into Pakistan from India.

Three were spotted in Rahimyar Khan District. One of them has reportedly covered a large area of Sakhi Kurwal.

Soend swarm was found in Kakiwali spread over eight square miles while third was hovering over herlki.

In the Bahawalpur district two swarms were located at Lakhiwali and Ghewwaka.

The agriculture secretary said that anti-locust drive was in full swing and multitudes of them had already been wiped out of existence.

He said, pesticides were being supplied free and exhaust-fitted jeeps had also been provided to locust-fighting squads.

He said that two aircraft were busy in carrying out the spray operation and an additional craft had now been provided.

He said that there was no alarming situation at all as all-out efforts were afoot to finish the locust swarms effectively. —PPI

CSO: 5400

PLANT HOPPER DAMAGES RICE IN THREE PUNJAB DISTRICTS

Karachi THE SUN in English 1 Oct 78 p 8

[Text]

ISLAMABAD, Sept.30: Considerable damage has been done to the rice crop particularly in Daska area due to white-backed plant hopper. This was noticed during the visit of Chairman, Agricultural Research Council, alongwith other scientists to the rice growing areas in the districts of Sheikhupura, Gujranwala and Sialkot.

According to official sources, since the attack was of serious nature and could be expected to increase if not arrested immediately, a hurried meeting of the rice entomologists was convened by the Agricultural Research Council to examine the situation, and to suggest possible control measures.

During the deliberations of the experts meeting it was confirmed that "hopper burn" as a result of the attack of white-backed plant hopper has been noted in isolated patches both in Punjab and Sind. It was further informed that the damage has been aggravated due to the recent rains that provided congenial environment for the development of this pest.

The damage by white-backed plant hopper is caused to the paddy crop at the earing stage. Irri varieties of rice having been in the earing stage are the major catch of

this pest. It was, however, feared that the pest may shift and damage basmati also at a later stage when Basmati rice starts earing.

Even though the attack has been noted in isolated patches it was strongly felt that immediate control measures to arrest the expansion of the pest should be undertaken to safeguard extensive losses to the rice crop.

The experts recommended that for the immediate control of white-backed plant hopper the infested spots should be located and treated with suitable pesticides. For IRRI-6 dusting with sevin at the rate of 1/2 kilogram of active ingredient per acre or spraying of malathion at the rate of one litre per acre should be used.

For Basmati 370, which is not in the earing stage at present, diazinon or furadon granules at the rate of 5-6 kilogram per acre should be used through irrigation. Application of these insecticides should be done to 2-3 acres along the periphery of the infested location.

The experts have also formulated a detailed plan of investigations to develop an effective strategy against the rice pests in general and white-backed plant hopper in particular. —APP

BRIEFS

ANTILOCUST OPERATION--Rawalpindi, Sept. 26--The army has launched anti-locust operations in the locust infested areas of Sukkur and Hyderabad Divisions and Cholistan in the Punjab, says an ISPR press release here today. Since the assumption of this responsibility, the army has conducted extensive surveys to locate hopper and locust swarms and the potential breeding places of this winged menace.--A.P.P. [Text]
[Peshawar KYBER MAIL in English 27 Sep 78 p 1]

LOCUSTS ENTER CHOLISTAN--Bahawalpur, Sept. 30--Three new largest swarms of locusts entered the Cholistan areas of District Rahim Yar Khan and Bahawalpur yesterday from across the border. Army troops have launched a giant operation to liquidate the menace according to an ISPR press release.--APP [Text] [Peshawar KHYBER MAIL in English 1 Oct 78 p 1]

MORE LOCUSTS ENTER--Bahawalpur, Oct. 1--A new large swarm of locust spreading over an area of five miles entered Cholistan from across the border at Tari Khan Shaheed area of Cholistan in Rahimyar Khan district today, says an ISPR press release issued here today. Army jawans deployed on anti-locust operation were spreading extensively in this area to destroy the menace. Two of the total three swarms of locust, which entered Cholistan area of district Bahawalpur and Rahimyar Khan two days before have been completely destroyed while the largest group, which entered Cholistan area through Kakiwali and Lakhiwali and travelled some 60 miles in the Cholistan areas were fought back by the spreading teams and it changed its way towards southwards. Effective measures were being taken to contain the big attack.--A.P.P. [Text]
[Peshawar KYBER MAIL in English 3 Oct 78 p 1]

ANTILOCUST MEASURES INCREASED--Karachi, Sept. 17: Antilocust measures have been stepped up in Tharparkar and Sanghar Districts of Sind by the officials of the plant protection department under the supervision of the army, according to a report received here from [word illegible]. During the last four days, 57 swarms of locusts were destroyed in the two districts. The Acting Deputy Martial Law Administrator, Hyderabad, Brig Aijaz Ahmad said in Mirpurkhas that the affected areas had been divided into three sectors. He said that the situation was under control. He further said that swarms of locusts had affected 65 villages in the boarding areas in India.--A.P.P. [Text] [Peshawar KHYBER MAIL in English 18 Sep 78 p 4]

ANTILOCUST OPERATION--Hyderabad, Sept. 19: The antilocust operations are in full swing in the desert areas of Sind, it was officially stated. An aerial spray was carried out in Nara desert area of Khairpur District in Khipro sector to destroy the hoppers. As regards ground operation, the field staff of Plant Protection Department is busy in eliminating the hoppers and adult swarms by ground spraying in all the three sectors of Khipro, Diplo and Chhor.--A.P.P. [Text] [Peshawar KHYBER MAIL in English 19 Sep 78 p 5]

CSO: 5400

VIETNAM

BRIEFS

RICE RAVAGED BY INSECTS--The CUU Long Provincial Party Committee and People's Committee have directed various districts and villages in mobilizing manpower and using all available means to exterminate leaf hoppers and stem borers ravaging some 13,000 hectares of 10th-month rice. Meanwhile, the provincial Agricultural Material and Technical Supply Corporation has provided local peasants with 60 tons of insecticide and 2,700 tons of fertilizer to protect and care for rice. [Ho Chi Minh City Domestic Service in Vietnamese 0200 GMT 18 Oct 78 BK]

CSO: 5400

END